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REPORT
OF THE
COMMISSIONER OF EDUCATION
FOR
THE YEAR ENDED JUNE 30, 1909

VOLUME I



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THE UNITED STATES
BUREAU OF EDUCATION.

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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, September 25, 1909.

SIR: It is now possible, in accordance with an arrangement between the Secretary of the Interior and the Public Printer, to count with confidence on the issuance of the first volume of the annual report of this office by the first week in December next following the close of the fiscal and scholastic year to which it relates; and the second volume, including the statistical tables, by the first week of the next following month of March. In view of this relatively early issuance of the first volume we may fairly expect that it will be widely used as a yearbook for ordinary reference in connection with educational movements of the recent past and the educational programme of the immediate future. Accordingly, every effort has been put forth in this office to render those portions of the volume which might serve such purposes as full and accurate as possible.

As a result of this effort the volume herewith presented will be found to contain numerous bare statements of fact. These several statements are necessarily packed, each of them, into small compass and with very little of connective tissue. It is believed that in this form they will best serve the diverse uses to which they will be put by different readers, each of whom will supply his own setting and interpretation of the facts which he employs.

There are, however, many readers of such reports to whom some provisional coordination and interpretation of these various materials may be of service. It is not to be forgotten that the changes and incidents herein set forth are not in reality unrelated one to another, but are, all of them, parts of one great movement of our civilization, each holding a place of its own in some current of that general movement. It is obvious that any survey which should attempt to map out the limits or determine the direction of these several currents must be altogether provisional in character. Even so, it would seem to promise a certain usefulness, in view of present needs. Accordingly attention will be called in the following paragraphs to some of the more important tendencies which can already be discerned in the educational world, particularly within the limits

of the United States, in the period under consideration. Inasmuch as the statistical portion of the report is to follow this volume within a brief period, the numerical summaries which have in the past appeared in connection with the commissioner's introduction are this year deferred for presentation in the second volume.

EDUCATION AND MORALS.

1. The year 1908-9 has been marked in our educational history by an unusual emphasis upon the moral aspects of instruction. In the month of September, 1908, there was held at the University of London what was known as the First International Moral Education Congress. The published record of the proceedings of this congress opens with the following brief survey of recent movements in moral education:

The remarkable success of the First International Moral Education Congress is explained by the fact that during the last decade the interest in moral education has grown on all sides. In 1905 a new Italian education code was published, laying the utmost stress on moral education and making detailed regulations with regard to moral instruction. In the following year a new Hungarian education code was issued, which is even more emphatic and detailed in its references to moral education. In 1905 a new Austrian education code came to light, containing a large number of references to moral education. In Portugal an excellent manual of moral instruction for primary schools, as distinct from religious instruction, was officially published in 1906, and approved by the cardinal of Lisbon (*Compendio de Moral e Doutrina Christa*, by Conego Manuel Anaguim, Lisbon; Livraria Ferreira). In the United States schemes of moral instruction have been elaborated in many places. In Germany the most recent reading books for elementary schools contain abundance of ethical matter. In Switzerland several cantons have taken distinct steps in the direction of drawing up moral instruction programmes. In Belgium excellent moral instruction syllabuses for primary schools and for training colleges exist. In France and Japan, where moral instruction has already been introduced, the subject is being studied with redoubled interest. In Russia the authorities are turning their attention to this subject. And, finally, in England the code of the board of education for 1906 stated that "moral instruction should form an important part of every school curriculum."

While this congress was initiated by the International Union of Ethical Societies, it was given a broadly inclusive character, and achieved a noteworthy success in bringing together the representatives of widely divergent schools of thought. The substantial interest which it aroused is evidenced by the fact that it embraced representatives of twenty-one governments. A volume of Papers on Moral Education was published for the executive committee of the congress. The articles included in this volume present the subject in the greatest variety of ways, and give an impression of the astonishing amount of thought and interest which it has of late aroused. The separately published Records of the Proceedings includes an illuminating memo-

random on his "General impressions of the outcome of the congress," contributed by Prof. J. H. Muirhead. Professor Muirhead's first impression was of the vast amount of thought that is being given, in all parts of the civilized world, to the problem of moral education. Along with this was the impression that the countries represented were able to show in their reports a great amount of solid achievement in this field, particularly as regards the newer type of school under municipal control. The second impression was "that school is only a part, and at the best a very small part, of the means." These impressions as to matters of general agreement are followed by a third impression as to the great significance of the discussions in which marked disagreement appeared. Such differences were in evidence in the discussion of the moral value of coeducation and of systematic moral instruction. These, however, were insignificant in comparison with the differences concerning the relation between moral and religious education. It would appear from Professor Muirhead's memorandum that the discussion of this, the most delicate and difficult subject with which the congress could deal, was marked by dignity and seriousness, and might be expected to contribute somewhat to a common understanding on the part of those approaching the question from opposite sides.

There have been other years in which attention has been strongly centered upon this subject. Moral education has, however, been mainly discussed in the past, outside of ethical societies and purely pedagogical circles, as subsidiary to some other interest. The discussions of the past year show a marked tendency toward the consideration of morals as an independent and dominant concern in all educational procedure. While the relations of ethics to other subjects necessarily occupy a large place in these discussions, it is a normative rather than a tributary part which is commonly assigned to the ethical view of life.

In addition to the papers of the Moral Education Congress, a number of other significant publications have appeared. Foremost among these is the report on Moral Instruction and Training in Schools, in two volumes, edited on behalf of the international committee on moral training by Dr. Michael E. Sadler. The initial steps which led to the appointment of this international committee were taken by the Reverend Doctor Paton, of Nottingham, England, Mr. Harrold Johnson, Mr. Clifford W. Barnes, and Mr. W. T. Stead. The first fruits of their labors, as presented in this two-volume report, add greatly to the rich materials presented by the Moral Education Congress. It embraces brief accounts of the teaching of morals in many lands.

A brief list of recent books and articles relating to moral education is appended to this introduction.

RECOMMENDATIONS.

One of the definite forms which the question of moral education assumes in this country is the question as to provision in our courses of study for the direct and systematic teaching of morals. With reference to this question, it should be remarked in the first place that any such instruction can furnish at best only a small part of the actual moral education to be effected by the school. The view has been repeatedly emphasized that all school training and instruction that is worth anything is moral in its influence. It should be added that mere talk about morals is the driest part, as the mere appeal to moral emotion is the least substantial part, of what the school can accomplish in this field. The moral life is rooted in every serious occupation in life. The pursuit of the sciences, the preparation for industry, and all other school occupations are not only associated with pervasive moral influences, but they offer also some of the substantial materials of moral character. It is none the less true that, because the moral life is rooted in all forms of human occupation and interest, the intellectual interest in clear thinking and system is one of its supports; and one of the available and necessary modes of approach to the subject is that of direct instruction concerning its various aspects, forms, and characteristics. Such detailed and orderly instruction, moreover, may be mightily reenforced by examples drawn from history and literature and from every-day experience.

The achievements of France and Japan as regards systematic moral instruction in the public schools is worthy of the most careful consideration. With all of its deficiencies, such instruction in these two countries has apparently accomplished much that is well worth the doing. As President Thwing has said in his recent work on Education in the Far East, speaking of Japan:

No subject of the whole course of study, from the primary school to the university, is so commonly taught or is so constantly honored in its teaching as the science of right living (p. 14).

No subject has taken a serious place in the make-up of an educated man until it has been consciously thought about and studied, and morals can be no exception to the rule. Much interest, accordingly, attaches to the efforts which have been making, particularly within the past year in this country, to prepare really interesting and informing manuals of moral instruction and to devise methods of teaching this subject in the public schools. The outcome of some of these efforts is indicated in the list of publications at the end of this introduction. I wish to call the especial attention of school authorities to the importance of providing in some way for explicit instruction in this subject in the public schools, not omitting reference to the side of

civic and industrial obligations and that of courtesy in manners. Let it be frankly admitted that such explicit teaching is the smallest part of the work to be done, but let it not be forgotten that it is also an indispensable part.

Those who would maintain that the moral life has other rootings than that in religion, would, for the most part, admit that it is deeply rooted in religion, and that for many of our people its strongest motives are to be found in their religious convictions; that many, in fact, would regard it as insufficiently grounded and nourished without such religious convictions. The teaching of religious systems is no longer under serious consideration so far as our public schools are concerned. Historical and social influences have drawn a definite line in this country between the public schools and the churches, leaving the rights and responsibilities of religious instruction to the latter. It would be futile, even if it were desirable, to attempt to revise this decision of the American people. There has been, however, within the past two or three years a widespread discussion of the proposal that arrangements be made between the educational authorities and ecclesiastical organizations under which pupils should be excused from the schools for one half-day in the week—Wednesday afternoon has been suggested—in order that they may in that time receive religious and moral instruction in their several churches. This proposal has been set forth in detail by the Rev. George U. Wenner, D. D., in a volume entitled "Religious Education and the Public School" (see the list of references at the end of this chapter), and has been under consideration by a representative committee during the past two or three years.

A good deal of interest attaches to this proposal, which is closely related to the practice followed in the public schools of St. Louis many years ago during the superintendency of Dr. William T. Harris. Whether the plan is workable on a large scale or not, under American conditions, can only be determined by a fair trial in communities in which public sentiment clearly supports the experiment. It is not to be supposed that it will even be put upon its trial in the absence of such public sentiment. In any community which should provide for the withdrawal of pupils from the public schools, by their parents, for such hours of religious instruction, it is fair to expect that emphasis will be laid by the religious teachers upon those moral values which are the immediate concern of the state; and these hours, moreover, should be utilized by the school authorities for such serious and well-considered moral instruction as may properly be given to those pupils who, by their parents' choice, should spend them in the public school under the care of their regular teachers.

ART EDUCATION.

2. However faithfully the fine arts may be taught for their own sake, without moralizing, their moral implications are subtle and profound. For this reason and for every reason a large significance attaches to the efforts which are now making to further the development of art education in this country. We are still too prone to treat the fine arts, including music, as a pretty embroidery upon our educational fabric. It is safe to say that we shall not get a well-balanced education as regards moral influence, civic ideals, or personal and industrial efficiency, until instruction on the side of the arts shall become as seriously and effectively organized in our courses of studies as is instruction on the side of the sciences. Art is, indeed, as Dr. Halsey Ives has put it, "a constructive influence in the development of civilization."

As regards the general diffusion of art education, the significant event of the year was the Third International Art Congress for the Development of Drawing and Art Teaching and their Application to Industries. The congress was held in London, in the month of August, 1908. Its title relates it to the renewed activity in respect to industrial or vocational training. This latter movement reaches down to the very foundations of democratic society where, also, in every modern nation must be laid the basis of national art.

A permanent and valuable result of child study is exemplified in the importance attached, in this congress, to the child's own interest in the initial stages of art instruction. This principle was emphasized in the discussions, and it is a marked feature of the new system of art instruction adopted by the French Government for its schools during the present year. In this particular the influence of American precedents is recognized. But while, as the art work of our schools plainly shows, we hold a commanding position in respect to the early stages of instruction in this branch, our own representatives at the London congress were struck by the weak points in the more advanced stages of our school work. Their opinions on these points, quoted elsewhere in this report, deserve special attention.

The effort to secure unity of action on the part of the various agencies engaged in this country in the development of the fine arts led to a meeting at Washington in May, 1909, which resulted in the formation of a federation of American art societies. The proceedings of the convention which called this association into existence indicate its broad purpose. The province of fine arts, as an expression of ideal beauty, was here related to the creation of a national sense of beauty through the instrumentalities of common life—the school, the home, rural highways, and the "city beautiful."

On account of the signal interest in the subject of art instruction at the present time, and the broader aspects which the subject is assuming, the moment seemed opportune for a comprehensive survey of the agencies for the promotion of this interest in our own country. Such a survey has accordingly been presented in a statistical monograph issued as a number of the bulletin of this office, bearing the title "Instruction in the Fine and Manual Arts in the United States," which was prepared by Mr. Henry Turner Bailey, one of the representatives of this department at the London congress. (Bureau of Education, Bulletin, 1909, No. 6, 184 p.) Attention should be called also to the attractive illustrated volume entitled "Art Education in the Public Schools of the United States," which was edited by Mr. James Parton Haney, as part of the American exhibit at the congress. (New York, American Art Annual, 1908, 432 p.)

EDUCATION FOR HEALTH.

3. The hygienic side of education has been brought under strong emphasis in the course of the year. Such emphasis was first laid and most conspicuously by the International Congress on Tuberculosis, held in the city of Washington September 21-October 12, 1908. This congress was attended by many of the foremost authorities of all lands in matters relating to tuberculosis. By its discussions, its exhibits, and its awards, it directed the attention of our people as never before to the need of general knowledge touching the prevention of tubercular diseases; and inasmuch as these preventive measures are in large part those which make for the general health of the body, the influence of the congress has counted for the advancement of educational hygiene in all of its aspects.

The measures adopted in this country to check the spread of tuberculosis have been reviewed by Mr. Phil P. Jacobs, of the National Association for the Study and Prevention of Tuberculosis, who states that appropriations of over \$4,000,000 for the suppression of consumption have been made by 28 States in the year 1909. With appropriations from cities and counties and nearly \$1,000,000 from the National Government, it is estimated that about \$8,000,000, all told, have been publicly appropriated during the past year for the fight against tuberculosis. Of the 43 States and Territories whose legislatures held sessions after January 1, 1909, 28 passed laws pertaining to this disease. (The Survey, vol. 22, p. 821-822, September 18, 1909.)

It is indeed fortunate that this special propaganda should have given to the movement for health-teaching in the schools such an impetus as many years of more general advocacy had failed to bring

about. Particular attention should be called to the findings of the jury of awards of the Tuberculosis Congress with reference to educational leaflets submitted in competition. The following is a list of the more important of these awards:

CLASS A.—LEAFLETS FOR ADULTS GENERALLY.

\$100 prize (highest award).—Plain facts about tuberculosis. Pennsylvania Society for the Prevention of Tuberculosis.

Silver medal.—Schutz vor Schwindsucht. Verein zur Bekämpfung der Schwindsucht in Chemnitz und Umgebung.

Special award, gold medal.—Consumption is the most common form of tuberculosis and is a germ disease. O. D. Wescott, M. D., Denver, Colo.

CLASS B.—LEAFLETS FOR TEACHERS.

Gold medal.—Tuberculosis, a leaflet for teachers. H. S. Goodall, M. D., New York.

Silver medal.—The warfare against tuberculosis and the relation of teachers thereto. George H. Kress, M. D., Los Angeles, Cal.

CLASS C.—LEAFLETS FOR MOTHERS.

\$100 prize (highest award).—Schutz vor Schwindsucht. Merkblatt für Mütter. Verein zur Bekämpfung der Schwindsucht in Chemnitz und Umgebung.

Gold medal.—Facts a mother should know concerning tuberculosis. George H. Kress, M. D., Los Angeles, Cal.

Silver medal.—Educational leaflet for mothers. Miss Mabel Jaques, Philadelphia.

In medical schools lectures on hygiene have been given for many years. Harvard University has recently established a department of preventive medicine and hygiene, the object of which is to prepare men to serve on boards of health, state or municipal, and to investigate the causes of epidemics and methods of preventing the spread of epidemics.

The training for health in the public schools appears in the form of various activities which overlap and reenforce one another. Medical inspection of the schools has received unusual attention within the past year. Louisiana has provided for the testing of the sight and hearing of all pupils during the first month of the school year (act of July 9, 1908), and a similar act in Colorado provides for the more general inspection of all school children, with a view to detecting and correcting physical defects. Indiana has passed an act providing for medical inspection of schools, Ohio an act authorizing city school boards to employ medical inspectors and nurses in the public schools, and New Jersey an act requiring boards of education to employ competent physicians as medical inspectors. Traveling physicians have within the year been employed for the first time in the Alaska school service, whose business it is to treat the sick among the Eskimo and Indians and teach them the practice of hygienic living.

Open-air schools for tubercular children have been established in Boston, Brookline, Providence, New York, Pittsburg, Chicago, and other cities. The playground movement and the promotion of wholesome play among school children, together with related efforts represented by athletic and other associations, have made marked progress. The comprehensive programme for the supervision and promotion of those school activities which have most to do with the health of pupils, particularly as it is carried out in the cities of New York, Boston, and St. Louis, has excited warm interest and admiration.

An important contribution has been made to the literature of medical inspection in a volume prepared by Doctors Gulick and Ayres under the auspices of the Russell Sage Foundation, entitled "Medical Inspection of Schools." (New York, Charities Publication Committee, 1908, x+276 p.) This work presents a general survey of the subject, brought down to the year 1908. Another publication relating to health in the schools may be mentioned here, namely, "The Daily Meals of School Children," by Miss Caroline L. Hunt (Bulletin of the United States Bureau of Education, 1909, No. 3, 62 p.), which has proved useful in suggesting to parents and teachers wholesome measures relative to the feeding of children of school age.

The year has been a good one in what it has done for wholesome living as regards the physical life. The bearings of such wholesome living upon the moral character of our people are incalculable but none the less obvious.

The Third International Congress on School Hygiene will be held at Paris, France, August 2-7, 1910. These congresses have proved a valuable aid in the extension of interest and information relative to school hygiene, and American school men will follow with unusual interest the proceedings of the Paris meeting.

TRAINING FOR VOCATION.

4. Industrial education has continued to command attention in all parts of the country. While progress in this field is still represented mainly by inquiries and discussions, it is a fact of no small importance that those discussions are manifestly tending to greater clearness in our conception of the problem. What will probably rank as the best statement, up to this time, of the nature and conditions of that problem, was the presidential address of Dr. L. D. Harvey, of the National Education Association, presented at the Denver meeting, in July of this year. Doctor Harvey showed that skill in industrial processes must be related to a broad knowledge not only of industrial needs and conditions, but also of the larger demands of human life. His survey of the various types of industrial school was comprehensive and suggestive.

While the subject of industrial education was one of the leading topics at the meeting of the national association, it was the sole topic of an extremely interesting meeting of the National Society for the Promotion of Industrial Education, held at Atlanta in November, 1908. In addition to the reports of proceedings of these organizations, a considerable literature on industrial education has appeared in the course of the year. One number of the *Annals of the American Academy of Political and Social Science* at Philadelphia (vol. 33, No. 1) was devoted to a symposium upon this subject. Prof. Paul H. Hanus has issued a volume on *Beginnings in Industrial Education*. Important reports, bulletins, and circulars have been issued by the New York State Education Department, by the industrial education commissions of Massachusetts and New Jersey, and by the National Society for the Promotion of Industrial Education. It is a fact of more than ordinary significance that the American Federation of Labor has appointed a committee to report on the subject of trade schools, and that this committee has arranged for a conference upon the subject, to be held in the city of Washington in October, 1909. The committee on industrial education of the National Association of Manufacturers, which was created at the Pittsburg meeting of that organization in 1904, presented its fifth annual report at the New York meeting in May, 1909. At least four other national industrial organizations have committees dealing with the same subject.

Certain aspects of industrial education which have commanded attention in the course of the year are the following:

It becomes increasingly evident that one of the vital elements of the problem is the question of the relation of school training to shop practice or apprenticeship. Indeed there is danger that the plans and discussions of industrial training in schools will be "up in the air" unless due account be taken of these two necessary sides of such training and of their relation the one to the other. A preliminary study of this subject was made by President Carroll D. Wright shortly before his death, and was published by this office. (*Bureau of Education, Bulletin, 1908, No. 6, 116 p.*)

The special combination of shop practice with regular scholastic training, which was introduced two or three years ago by the University of Cincinnati, is still followed with much interest. A modification of this plan has been carried into effect in the public schools of Fitchburg, Mass. The interest which the city of Fitchburg has commanded during the year has been deepened by the provision which has now been made for model and practice schools for the teaching of manual arts in connection with the state normal school located in that city. A new building for the use of these schools is now nearing completion. A cooperative course in preparation for the metal trades has been introduced into the Lewis Institute, in Chicago, for boys from

16 to 20 years of age. Each boy in each of the two years of this course spends twenty-six weeks in the shop and twenty-four weeks in school, receiving from his employer the school tuition fee of \$50 a year and \$5 a week for the time he works in the shop.

The subject of industrial education is found to be most intimately connected with that of continuation schools. This connection is touched upon by a number of our American writers upon this subject, notably by Professor Hanus in his volume on "Beginnings in Industrial Education," to which reference has already been made. This office published a survey of the organization of continuation schools in this country and abroad in 1907 under the title "The Continuation School in the United States," by Mr. Arthur J. Jones (Bureau of Education, Bulletin, 1907, No. 1, 157 p.). A notable English work on this subject which has attracted much attention in this country is that of Dr. Michael E. Sadler, entitled "Continuation Schools in England and Elsewhere; Their Place in the Educational System of an Industrial and Commercial State." (Manchester, at the University Press, 1907, xxvi+779 p.)

Many diverse and often opposing interests are concerned in the effort to work out an American system of industrial education. All of these interests and the views which they have to present are to be given full and fair consideration. The point to be emphasized here is that to render such a system stable and altogether American it must be made a genuinely educational system. Our trade schools, in the long run, must be satisfactorily related to our whole system of schools. The only ultimate solution of the problem must necessarily be an educational solution.

Agricultural education has been stimulated during the year by the inquiries and the report of the Commission on Country Life, appointed by President Roosevelt. The establishment of agricultural high schools in different parts of the country goes steadily forward. Mississippi and Arkansas have made important beginnings in the establishment of such schools during the past year. Minnesota has provided for agricultural departments in the graded schools of the State.

The organization of the American Home Economics Association at the city of Washington in December, 1908, has given a new impetus to one of the most important branches of our industrial education, that which is commonly known as domestic economy or domestic science. One speaker at the meeting of the National Education Association at Denver proposed that the plain word "housekeeping" be used to describe this branch of school training. It is doubtful whether any other kind of industrial education has advanced more rapidly than this toward definite and practicable courses of training.

STATE SYSTEMS OF EDUCATION.

5. The most conspicuous change within the year in the field of state school administration is the reorganization of the Massachusetts Board of Education. The new board is in effect a consolidation of the old board, as it has been from the days of Horace Mann, with the more recent commission on industrial education. It is a matter of great significance for the development of education in the State that the unfortunate division of interest between representatives of the older system of schools and the advocates of industrial education is to all appearance brought to an end by this consolidation. The new board of nine members, appointed by the governor and confirmed by the council, includes certain individuals who had been members of the old board and of the industrial commission. This board is to appoint a commissioner of education for a five-term period, whose salary will be fixed by the governor and council. In addition to the powers formerly exercised by the secretary of the board of education, this new commissioner "shall have supervision of all educational work supported in whole or in part by the Commonwealth." He is to be assisted by two deputy commissioners, one of them being especially qualified to deal with industrial education. The reorganization went into effect on the 1st day of July, 1909.

There is a widespread effort toward a far-reaching revision of state school laws. This effort, as was shown in my report for the year 1908, has in several States taken the form of the appointment of educational commissions, upon whom has devolved the preliminary study of the proposed revision and the recommendation to the legislature of needed changes in the public statutes. Such a movement is still under way, as is shown by the appointment of new commissions of a similar character in the States of Connecticut, Michigan, Nebraska, North Dakota, Texas, West Virginia, and Vermont. Thus far, however, this method of dealing with the question has proved in a measure disappointing. Some of the commissions have issued publications of an informing character and have made valuable suggestions as to statutory improvements. In the States of Pennsylvania, Illinois, and Iowa, however, in which some of the most important work by educational commissions has been done, the definite measures which they have laid before the legislatures have failed to become laws. In West Virginia, on the other hand, which was a pioneer in this method of dealing with the problem, the labors of a state commission eventuated in a greatly improved school code, adopted March 6, 1908.

It is not to be supposed, however, that the good influence of any one of these state commissions is even now at an end; and in some instances, as in Kentucky, Maryland, and Virginia, their formal

reports are not due until the year 1910. In the States just mentioned and in other States of the South the educational campaign, to which attention was called in my report for the year 1908, is still commanding the deepest interest. In Kentucky special "whirlwind campaigns" have been conducted in the shape of a large number of public addresses in different parts of the State, condensed into a few days or a few weeks at the most, the purpose of which is to concentrate public attention on particular needs of the state school system. It would be impossible to enumerate here any considerable number of the interesting developments in southern education within the period under review. As examples, however, mention may be made of the employment by the State of Virginia of a state supervisor of rural schools, and the provision made in the State of North Carolina for supervision, from the office of the state superintendent of public instruction, of all agencies in the State which deal with the training of teachers.

Two important conferences of the chief school officers of the several States and Territories with representatives of the Bureau of Education have been held within the year, one at Chicago in February, 1909, in connection with the meeting of the department of superintendence of the National Education Association, and one at Denver in July of this year, in connection with the general meeting of the National Education Association.

In the recent history of city school administration more than ordinary interest attaches to the resignation of Dr. Edwin Gilbert Cooley, who for nine years was superintendent of schools of the city of Chicago. Superintendent Cooley has been succeeded by Mrs. Ella Flagg Young, for many years connected with the schools of Chicago, and for the past four years principal of the Chicago Normal School.

PUBLICATIONS.

6. As one studies the educational movements of the year and their expression in books and magazine articles the conviction is deepened that there has been an unusual activity in educational authorship, and that its course has been marked by the appearance of a number of really notable works. Some of these have already been mentioned. Attention is called here to the fact that both in England and in the United States a high grade of scholarly research has been devoted to historical studies in the field of education. For a single example reference may be made to the work of Mr. Foster Watson, which is this year represented by his volume on *The English Grammar Schools to 1660; Their Curriculum and Practice* (Cambridge, 1908, x+548 p.). Another class of publications in which marked progress has been made in this country during the

year is that having to do with the actual practice of educational institutions. Several recent volumes deal with the management of rural schools, of city grammar schools, of high schools, etc., while there are also substantial and interesting works devoted to the general administration of city school systems. A conspicuous example is *The Administration of Public Education in the United States*, by Drs. Samuel T. Dutton and David Snedden (New York, 1908, viii+601 p.).

The twenty-seventh volume of the *Documentary History of Education in Upper Canada*, by Dr. J. George Hodgins, F. R. G. S., librarian and historiographer of the education department of Ontario since 1890, was completed in 1908. This history has involved immense research and discriminating judgment, and is indispensable to all students interested in the social and educational history of Canada. Doctor Hodgins, who has reached the advanced age of 88 years, is still actively engaged in his monumental work as well as in the duties of his official position.

The annual *Bibliography of Education* for the year 1908-9, prepared by this office, will be issued as a number of the *Bulletin* in the near future, probably appearing before the issuance of this volume of the annual report. It presents a summary of a significant year's work on the part of the educational writers of this country, and to some extent of European writers.

COLLEGES AND UNIVERSITIES.

7. No part of the educational literature of the year has been of greater interest than that having to do with our colleges and universities. Much of this literature has been in the nature of adverse criticism, although it must be admitted that such criticism has been tempered by evidence of the great respect, and indeed the affectionate regard, with which the most of the critics look upon the institutions concerning which they have written.

"Two distinct but converging lines of criticism," says President Nicholas Murray Butler in an article in the *New York Evening Post* for September 25, 1909, "appear to confuse the public mind as to the present position and value of the American college." He continues:

The one proceeds from those serious-minded and constructive men, within college service or without it, who are jealous for the college and who are anxious promptly to meet and to solve each new problem as it arises, and so to keep the work of the college as nearly perfect as may be. The other is set in motion by the lapping waves of that presently popular tide whose yellow is, as the dictionaries have it, a token or symbol of jealousy, envy, melancholy. Probably, through inadvertence, the dictionaries omit to add the word "ignorance."

President Butler's article discusses the criticism of the college rather than that of the university, and deals particularly with the

relations of the college to the secondary school, to its instruction, and to its discipline.

There is a promise of a better understanding of the whole situation with which this criticism deals, in the fact that it has led up to utterances of marked significance by several of our leading college and university presidents, of which President Butler's article is an example. One can not get a better idea of the discussion at its present stage than by a careful reading of these utterances. They are for the most part too compactly written to admit of much condensation. A few selected paragraphs, however, will be presented here as embodying some of the more striking and significant opinions which they have conveyed. In some instances dependence has been had on reports in the daily press, which must be taken as subject to correction in more authoritative publications.

An article by President Arthur Twining Hadley in the New York Times for August 28, 1909, entitled "College education and general culture," deals in particular with the college ideal of culture as related to technical instruction. The following passages are taken from this article:

* * * There is a vigorous movement, whose strength those of us who live in the East do not always realize, to approximate our American system of higher education to the German type—to make our universities almost entirely places of technical training and leave to the high schools and academies the work of caring for general culture.

* * * The men who have had charge of technical education have known what they wanted; they have had a consistent and settled policy. The men who have been charged with the duty of promoting general culture have not adequately defined their aim, nor have they pursued it by consistent and practical means. * * *

But how shall we define culture? This is a question which even Matthew Arnold has found it no easy matter to answer. Culture is one of those complex things which it is easier to describe than to define.

As a starting point for a description, I should say that culture was the opposite of absorption in the obvious. The obvious is that which gets in our way—the thing we can not help seeing in its full size. The cultivated man or woman is the one who in the various fields of life, material and social, literary and political, values in proper proportion the things which are unseen, or at best very imperfectly seen, by the less trained vision.

* * * It is the characteristic of the uncultivated man that he sees the maple tree and ignores the landscape. It is characteristic of the man of culture to insist on knowing and feeling what is behind. Where others are content to be blinded by their emotion, [he] as instinctively asks for evidence; and in proportion as he is a man of true culture he weighs that evidence objectively. Where others see present interests large and future interests small he gets things in their right relations to one another. It is from this practice (often unconscious) of weighing evidence and getting things in their large and permanent relations that the man of real culture acquires what is perhaps his most universal characteristic—a certain habit of repose. He keeps quiet while others are tossed to and fro; and as a result he sees the same signals and keeps the same course from hour to hour, while others lose their bearings. * * *

Of the public importance of culture in this broad sense there can be no question at all. Without it the people will pursue small things instead of large ones—will be dazzled by immediate success or daunted by immediate difficulties, until they lose their way wholly. "Where there is no vision the people perish." This is true everywhere. It is particularly true in a republic like our own, whose destinies depend not on the sagacity of men specially educated in the arts of statecraft, but upon the intelligence of the people as a whole. In Germany at the present day the training of each individual for his special walk in life is unequalled; but in the opinion of many the training of the nation for its national duties is inadequate, and would be still more inadequate than it is were it not for the compulsory service which every man must render to the army. If such a state of overspecialization should come about in America, it would, I think, do more harm than it does in Germany; first, because we are not likely under any circumstances to have compulsory military training, and, second, because specialization in a monarchy only interferes with the development of the individual, while in a republic it menaces the intelligent conduct of the whole body politic. A republic of specialists is a contradiction in terms. * * *

The growing complexity of the American social organization, the increase of wealth and the comforts and luxuries which wealth brings with it, the development of games and sports of every kind, and the great stress which all branches of society lay upon proficiency in those sports create a set of very distracting conditions in college as well as out of it. They lead the student who has no special intellectual interest, but comes to college for the sake of general culture, to seek that general culture on the lines of least resistance. But if our definition of culture is correct, we can hardly expect to obtain it in this way. The student who looks only at the immediate interests of the moment is becoming uncultured rather than cultured—is being trained to narrow angles of vision instead of wide ones. * * *

Are there any means at our command for meeting this difficulty in the future better than we have done in the past? I believe that there are.

In the first place, I would have every boy who goes to college impress himself with the idea that he is being trained for public service in some form or other. * * *

In the second place, I would have the culture courses of the American college so arranged as to assist the student in making an intelligent choice of a profession. This is not so difficult as it sounds. The old theory that each student had a special adaptation for particular subjects and that the college had to provide as many different courses as there were different careers in life is now abandoned. We are learning that there are three or four main types of mind. There is a scientific type, which is interested in the orderly arrangement of facts and which subdivides itself according as a boy is possessed of mathematical or nonmathematical tastes. There is a literary type, which is concerned not with the arrangement of facts, but with the expression and communication of ideas. There is a practical type, which cares not so much for the arrangement or the expression as for the utility of the things learned. Each type of mind is fitted for a certain group of professions. From the scientific type we make our engineers, technologists, and physicians. From the literary type we make our journalists, our preachers, our teachers, and our jury lawyers. From the practical type we make our consulting lawyers, our administrators, and our successful men of business. Which group of callings a boy can successfully choose is determined by the mental type. Which calling within the group falls to his lot is, in nine cases out of ten, the result of outside circumstance. If you train a college boy in the methods appropriate to his profession without attempting to choose prematurely what his exact calling will be or to specialize

on any particular set of topics which you think he will use in after life, you can make a course broad enough to meet the needs of general culture and yet give the student a large part of the interest which attaches to professional training. You can teach him to study things that he is not going to use by methods that he is going to use. The latter element provides the mental discipline of the old curriculum; the former gives us the breadth of the elective system without involving us in its weaknesses.

President Woodrow Wilson has commanded general attention by several addresses in which he has recently dealt with the college and university problem. The following paragraphs are taken from one of these, bearing the title "The spirit of learning," which was delivered before the Harvard Chapter of Phi Beta Kappa on the 1st of July, 1909:

Here is the key to the whole matter: The object of the college, as we have known and used and loved it in America, is not scholarship (except for the few, and for them only by way of introduction and first orientation), but the intellectual and spiritual life. Its life and discipline are meant to be a process of preparation, not a process of information. By the intellectual and spiritual life I mean the life which enables the mind to comprehend and make proper use of the modern world and all its opportunities. The object of a liberal training is not learning, but discipline and the enlightenment of the mind. The educated man is to be discovered by his point of view, by the temper of his mind, by his attitude toward life, and his fair way of thinking. He can see, he can discriminate, he can combine ideas and perceive whither they lead; he has insight and comprehension. His mind is a practiced instrument of appreciation. He is more apt to contribute light than heat to a discussion, and will oftener than another show the power of uniting the elements of a difficult subject in a whole view; he has the knowledge of the world which no one can have who knows only his own generation or only his own task.

What we should seek to impart in our colleges, therefore, is not so much learning itself as the spirit of learning. You can impart that to young men; and you can impart it to them in the three or four years at your disposal. It consists in the power to distinguish good reasoning from bad, in the power to digest and interpret evidence, in a habit of catholic observation and a preference for the nonpartisan point of view, in an addiction to clear and logical processes of thought and yet an instinctive desire to interpret rather than to stick in the letter of the reasoning, in a taste for knowledge, and a deep respect for the integrity of the human mind. It is citizenship of the world of knowledge, but not ownership of it. Scholars are the owners of its varied plots in severalty.

* * * College is a place of initiation. Its effects are atmospheric. They are wrought by impression, by association, by emulation. The voices which do not penetrate beyond the doors of the class room are lost, are ineffectual, are void of consequence and power. No thought will obtain or live there for the transmission of which the prevailing atmosphere is a nonconducting medium. If young gentlemen get from their years at college only manliness, esprit de corps, a release of their social gifts, a training in give and take, a catholic taste in men, and the standards of true sportsmen, they have gained much, but they have not gained what a college should give them. It should give them insight into the things of the mind and of the spirit, a sense of having lived and formed their friendships amidst the gardens of the mind where grows the tree of knowledge of good and evil, a consciousness of having taken on them the vows

of true enlightenment and of having undergone the discipline, never to be shaken off, of those who seek wisdom in candor, with faithful labor and travail of spirit.

These things they can not get from the class room unless the spirit of the class room is the spirit of the place as well and of its life; and that will never be until the teacher comes out of the class room and makes himself a part of that life. Contact, companionship, familiar intercourse is the law of life for the mind. The comradeships of undergraduates will never breed the spirit of learning. The circle must be widened. It must include the older men, the teachers, the men for whom life has grown more serious and to whom it has revealed more of its meanings. So long as instruction and life do not merge in our colleges, so long as what the undergraduates do and what they are taught occupy two separate, air-tight compartments in their consciousness, so long will the college be ineffectual.

* * * I have no jealousy of athletics; it has put wholesome spirit into both the physical and the mental life of our undergraduates. There are fewer morbid boys in the new college which we know than there were in the old college which our fathers knew; and fewer prigs, too, no doubt. Athletics are indispensable to the normal life of young men, and are in themselves wholesome and delightful besides. In another atmosphere—the atmosphere of learning—they could be easily subordinated and assimilated. The reason they can not be now is that there is nothing to assimilate them, nothing by which they can be digested. They make their own atmosphere unmolested. There is no direct competition.

The same thing may be said, for it is true, of all the other amusements and all the social activities of the little college world. Their name is legion; they are very interesting; most of them are in themselves quite innocent and legitimate; many of them are thoroughly worth while. They now engross the attention and absorb the energies of most of the finest, most spirited, most gifted youngsters in the undergraduate body, men fit to be scholars and masters in many fields, and for whom these small things are too trivial a preparation. They would not do so if other things which would be certain to grip these very men were in competition with them, were known and spoken of and pervasive in the life of the college outside the class room; but they are not. The field is clear for all these little activities, as it is clear for athletics. Athletics has no serious competitor except these amusements and petty engrossments; they have no serious competitor except athletics. The scholar is not in the game.

* * * So soon as the things which now dissipate and distract and dissolve our college life feel the things which should coordinate and regulate and inspire it in direct contact with them, feel their ardor and their competition, they will fall into their proper places, will become pleasures and cease to be occupations, will delight our undergraduate days, but not monopolize them. They are exaggerated now because they are separated and do not exchange impulses with those greater things of whose presence they are sometimes hardly conscious.

No doubt there are many ways in which this vital association may be effected, but all wise and successful ways will have this in common, that they will abate nothing of the freedom and self-government which have so quickened and purified our colleges in these recent days of change. will have no touch of school surveillance in them. You can not force companionships upon undergraduates, if you treat them like men. You can only create the conditions, set up the organization, which will make them natural. * * *

My plea, then, is this: That we now deliberately set ourselves to make a home for the spirit of learning; that we reorganize our colleges on the lines

of this simple conception, that a college is not only a body of studies but a mode of association; that its courses are only its formal side, its contacts and contagions its realities. It must become a community of scholars and pupils—a free community, but a very real one, in which democracy may work its reasonable triumphs of accommodation, its vital processes of union. I am not suggesting that young men be dragooned into becoming scholars or tempted to become pedants, or have any artificial compulsion whatever put upon them, but only that they be introduced into the high society of university ideals, be exposed to the hazards of stimulating friendships, be introduced into the easy comradeships of the republic of letters. By this means the class room itself might some day come to seem a part of life.

In this review of the discussion touching college education, as well as in other portions of the present volume, no attempt is made to hold to the hard-and-fast limit of the scholastic year which ended with the month of June. The more conspicuous contributions of university presidents to this discussion have generally appeared since the beginning of this current year. One of the latest of these, which has been put forth while this volume is going through the press, is too important to be omitted from such a symposium. Reference is made to the inaugural address of President Abbott Lawrence Lowell, delivered at Cambridge on the 6th of October, from which the following excerpts have been taken:

If, then, the college is passing through a transitional period, and is not to be absorbed between the secondary school on the one side and the professional school on the other, we must construct a new solidarity to replace that which is gone. The task before us is to frame a system which, without sacrificing individual variation too much, or neglecting the pursuit of different scholarly interests, shall produce an intellectual and social cohesion, at least among large groups of students, and points of contact among them all. This task is not confined to any one college, although more urgent in the case of those that have grown the largest and have been moving most rapidly. A number of colleges are feeling their way toward a more definite structure, and since the problem before them is in many cases essentially the same, it is fortunate that they are assisting one another by approaching it from somewhat different directions. What I have to say upon the subject here is, therefore, intended mainly for the conditions we are called upon to face at Harvard. * * *

The individual student ought clearly to be developed so far as possible, both in his strong and in his weak points, for the college ought to produce not defective specialists, but men intellectually well rounded, of wide sympathies and unfettered judgment. At the same time they ought to be trained to hard and accurate thought, and this will not come merely by surveying the elementary principles of many subjects. It requires a mastery of something, acquired by continuous application. Every student ought to know in some subject what the ultimate sources of opinion are and how they are handled by those who profess it.

* * * Our law school lays great stress upon native ability and scholarly aptitude, and comparatively little upon the particular branches of learning a student has pursued in college. Any young man who has brains and has learned to use them can master the law, whatever his intellectual interest may have been; and the same thing is true of the curriculum in the divinity school. Many professors of medicine, on the other hand, feel strongly that a student

should enter their school with at least a rudimentary knowledge of those sciences, like chemistry, biology, and physiology, which are interwoven with medical studies; and they appear to attach greater weight to this than to his natural capacity or general attainments. Now, that we have established graduate schools of engineering and business administration, we must examine this question carefully in the immediate future. If the college courses are strictly untechnical, the requirement of a small number of electives in certain subjects, as a condition for entering a graduate professional school, is not inconsistent with a liberal education. But I will acknowledge a prejudice that for a man who is destined to reach the top of his profession a broad education, and a firm grasp of some subject lying outside of his vocation, is a vast advantage; and we must not forget that in substantially confining the professional schools at Harvard to college graduates we are aiming at the higher strata in the professions.

* * * We have heard much of the benefit obtained merely by breathing the college atmosphere, or rubbing against the college walls. I fear the walls about us have little of the virtue of Aladdin's lamp when rubbed. What we mean is that daily association with other young men whose minds are alert is in itself a large part of a liberal education. But to what extent do undergraduates talk over things intellectual, and especially matters brought before them by their courses of study? It is the ambition of every earnest teacher so to stimulate his pupils that they will discuss outside the class room the problems he has presented to them. The students in the law school talk law interminably. They take a fierce pleasure in debating legal points in season and out. This is not wholly with a prospect of bread and butter in the years to come; nor because law is intrinsically more interesting than other things. Much must no doubt be ascribed to the skill of the faculty of the law school in awakening a keen competitive delight in solving legal problems; but there is also the vital fact that all these young men are tilling the same field. They have their stock of knowledge in common. Seeds cast by one of them fall into a congenial soil, and, like dragon's teeth, engender an immediate combat.

Now, no sensible man would propose to-day to set up a fixed curriculum in order that all undergraduates might be joint tenants of the same scholastic property; but the intellectual estrangement need not be so wide as it is. There is no greater pleasure in mature life than hearing a specialist talk, if one has knowledge enough of the subject to understand him, and that is one of the things an educated man ought so far as possible to possess. * * *

A discussion of the ideal college training from these three different aspects, the highest development of the individual student, the proper relation of the college to the professional school, the relation of the students to one another, would appear to lead in each case to the same conclusion—that the best type of liberal education in our complex modern world aims at producing men who know a little of everything, and something well. Nor, if this be taken in a rational rather than an extreme sense, is it impossible to achieve within the limits of college life * * *.

A large college ought to give its students a wide horizon, and it fails therein unless it mixes them together so thoroughly that the friendships they form are based on natural affinities, rather than similarity of origin. Now these ties are formed most rapidly at the threshold of college life, and the set in which a man shall move is mainly determined in his freshman year. It is obviously desirable, therefore, that the freshmen should be thrown together more than they are now.

* * * The university touches the community at many points, and as time goes on it ought to serve the public through ever-increasing channels. But

all its activities are more or less connected with, and most of them are based upon, the college. * * * A greater solidarity in college, more earnestness of purpose and intellectual enthusiasm, would mean much for our nation. * * * When the young men shall see visions the dreams of old men will come true.

It is evident from the passages quoted above that among the leaders of American university education there is a growing and surprisingly unanimous conviction regarding the directions in which improvement should be made in our system of higher education. It is to be rendered more coherent, more vital, more democratic. In the words of President Butler:

The American college is under fire, no doubt. Well-directed, intelligent firing will do it good. It is far from perfect, but it knows its job and is working at it with the skill born of long and successful experience.

No publication of the year touching our higher education has excited more widespread interest than the series of articles by Mr. Edwin E. Slosson in *The Independent*, each of which has been devoted to an entertaining and more or less critical account of a single institution. It is doubtless due in part to the undeniable skill with which these articles have been prepared, but also to the wide hold which the universities have gained upon the attention and the affection of the American public, that this series has been followed with so much of interest.

The issuance of Mr. Clarence Birdseye's second volume relating to college administration, "*The Reorganization of Our Colleges*," has been followed by the incorporation of the Higher Education Association. This association represents the interest of the public, and particularly of the alumni of the colleges, in the effective administration of the colleges and the increase of their influence for good, with particular reference to the immediate needs of the student body. It is significant of the American attitude toward all educational institutions, from the lowest to the highest, that such an organization should be formed outside of the membership of college faculties. More and more the universities become institutions of the people and for the people. In the case of the state universities, we may add, by the people.

The democratic movement in higher education has been emphasized during the year by the notable effort to organize in Massachusetts an institution which should bring courses of college instruction home to all communities in the State in which it may be desired—a project which has been referred by the legislature to the new state board of education for an opinion as to its advisability; by the step taken by the Cornell University authorities in the direction of the state-university form of organization, a step consisting in a modification of the university charter to provide for the appointment of five of its trus-

tees by the governor of the State; and by the beginnings at the University of Wisconsin of a more comprehensive and widely diffused system of university extension than any which has been previously undertaken in this country.

Within the year the University of Wisconsin has been a center of public interest in a variety of ways, not the least important of which is the Vilas bequest to that institution, which is expected to amount to about \$2,000,000, and to be so administered that it shall eventually reach a total of \$20,000,000. The fact that the available income of this fund is to be devoted largely to research renders it no less than an epoch-making endowment.

The criticism of our colleges and universities during the year has been freely extended to those great private foundations which are concerned with the encouragement of education by financial grants—one of the latest developments of our educational system—and particularly to the General Education Board and the Carnegie Foundation for the Advancement of Teaching. There are undoubtedly dangers connected with these great and beneficent endowments, and in several portions of the country attention has been called to those dangers with unsparing frankness. In an address before the National Association of State Universities, meeting in the faculty room of Harvard University in the latter part of the week of President Lowell's inauguration, President J. G. Schurman of Cornell University, the presiding officer of the association, stated the case as follows:

An irresponsible, self-perpetuating board, whose business is to dispense money, necessarily tends to look at every question from the pecuniary point of view; it wants its money's worth; it demands immediate and tangible results. Will not its large powers and enormous influence in relation to the institutions dependent upon it tend to develop in it an attitude of patronage and a habit of meddling?

I make no exception even of the Carnegie Foundation for the Advancement of Teaching, to which Mr. Carnegie has given such large endowment for the pensioning of professors in the colleges, technical schools, and universities of the United States and Canada. And I certainly speak with no prejudice, as I regard that endowment as the best thing any benefactor has ever done for higher education in America, and I have myself the honor of being one of the trustees. But I look with concern and anxiety on the influence of such corporations on the free and independent life of our institutions of learning and research.

So clear and fearless a recognition of the dangers and limitations of great general and private endowments for education, on the part of those directly concerned with the administration of such endowments, will go far to reassure our people as to the general usefulness and safety of those foundations under judicious management.

The year has been marked by an unusual number of notable changes in the personnel of our higher education. Mention may be made here of the death of Daniel Coit Gilman, who, as president of Johns Hop-

kins University, was the pioneer of organized graduate study in this country; the retirement of President Charles W. Eliot, of Harvard University, whose educational leadership, covering a period of forty years, has influenced all grades of instruction in America from the primary school to the schools of graduate and professional studies; and the resignation of the foremost leader of state university education of the past forty years, President James Burrill Angell, of the University of Michigan. President Cyrus Northrop, of the University of Minnesota, whose influence in his State through the long term of his service has been powerful and uplifting, has also resigned his high position. Many other changes of like significance and importance are mentioned in this volume in the chapter on current topics.

INTERNATIONAL AND FOREIGN.

8. Every year shows more clearly that the interests and the problems of education are in the main common to all civilized nations. Even those who have followed closely the trend of education in different parts of the world are often surprised with new illustrations of this fact. In all culture lands, broadly speaking, the different types and grades of education are coming into closer union, opportunities for advancement from the lowest schools to the higher are increased, the schools are made to concern themselves with preparation for a wider range of occupation in life, and a greater number of processes closely related to education are brought into organic connection with educational institutions. The recognition of education as a common interest has gone forward during the past year, finding expression in numerous international exchanges. Of these mention may be made here of but one, which is in a measure typical. The Latin-American countries have in recent years held a series of scientific congresses. This series culminated in a Pan-American Scientific Congress, which was held at Santiago, Chili, in December last. This country accepted the invitation to send delegates and was represented by a strong body of men, who exercised a marked influence upon the deliberations of the gathering. Their meeting with the leaders of South American thought was extremely promising of closer relations in the future between this country and its Latin-American neighbors. Steps were taken toward the convening of a second congress of a similar character in the year 1912 at the city of Washington.

The following notes upon education in a number of foreign countries have been prepared by specialists in this office:

THE UNITED KINGDOM.

In a broad survey of educational movements the most impressive feature of progress in Great Britain is the extension of the state systems in two directions—the one social, the other scholastic. Under

the first head may be included those services which pertain to the physical and moral well-being of the children of the poorer classes. The Scotch law authorizes school boards to take practical measures for the protection of children from neglect and abuse and for the supply of food and clothing at public cost to needy children. School boards are also empowered to defray the expenses of agencies for collecting and distributing information as to employments open to children on leaving school. In these respects the Scotch law is even more comprehensive and explicit than the "Education (administrative provisions) Act, England," passed in 1907. The latter is reenforced by the "Children Act" passed during the year, which deals in a comprehensive manner with problems of child life and juvenile offenders. Its important contribution to social welfare is the provision for the establishment of juvenile courts in the principal centers of England.

The Scotch law referred to above, like the earlier law for England, makes the establishment of the service of medical inspection of schools mandatory upon the local education authorities. In these social-welfare services the Government is following the lead of the chief cities of England and Scotland, but the action of the supreme authority not only gives new impetus to municipal and private agencies engaged in the work, but makes the service as wide as the nation itself.

It is significant that the measures above referred to have been adopted for economic reasons rather than altogether from promptings of benevolence. It is this conception that has led to recent exhaustive investigations of the conditions of school attendance in England as related to the social conditions and the enforced labor of children of school age. These investigations, of which somewhat extended accounts are given in the chapter on Education in Great Britain and Ireland, have brought the child population of England under a survey even more searching than that accomplished when the education law of 1870 was passed. The reports of the committees appointed for the work show, both by facts and by authoritative opinions, that enforced juvenile labor under present industrial conditions stunts the individual child and is a waste of national force, measured solely by the industrial outcome.

The most significant fact in respect to the scholastic extension of the system of education here considered is the authority conferred by the Scotch law upon school boards to require the attendance at continuation classes, according to their discretion, of young people between the ages of 14 and 17 years. The right is also reserved to the education department to enforce upon school boards the provision of continuation classes suited to local needs.

The extension of government authority to the sphere of secondary education has aroused critical scrutiny and fruitful discussion in

England of measures pertaining to this new field of action. During the year the board of education has issued important regulations and circulars for secondary schools, affecting, particularly, the courses of study. As a consequence, the subject of secondary curricula has engaged the attention of all associations and specialists in this department of education. The wide-reaching importance of this class of investigations is illustrated by a report on science teaching in public (endowed) schools, published by the board of education, and embodying the results of an investigation conducted by the association of science masters connected with the said schools acting in consultation with officials of the board.

The importance of the teaching profession has been emphasized during the year by the regulations of the English board of education for the staffing of schools, and by the clauses of the Scotch law giving teachers greater security of tenure and the prospect of a fair retiring allowance; and also by regulations for the preliminary training of intending teachers, which provide, in fact, for the rapid elimination of the pupil teacher from the service.

In the record of university movements the year has been eventful by reason of the reforms proposed by Lord Curzon, in his capacity as chancellor of Oxford, and by the initial measures for the organization of the two universities for Ireland in accordance with the recent law. Great results are eventually looked for through the influence of these two centers of learning in the work of unifying the public agencies of education in Ireland. Such action, which is confidently anticipated, will, it is believed, develop resources already available for education in Ireland, and bring the standard of popular education up to the level of the other divisions of the United Kingdom.

CENTRAL EUROPE.

There is one feature of the present movement in behalf of improvement of public education in central Europe which makes it more remarkable than like efforts of former decades. It is a movement of large dimensions; it is, as one has said, "grosszügig." Accordingly, we observe progress in legislation concerning public education, enormously increased expenditures for schools, new conceptions as to girls' schools, continuation schools, auxiliary schools, etc., new foundations for higher education, the extension of compulsory attendance, and the establishment of schools for vocational education.

The imperial statistical office now issues reports of school attendance and expenditures for all of the States of Germany, as the Austrian central commission now does for all of the Austrian crown lands, and as the Swiss yearbook has done for many years for all of the cantons of the federation. It has recently made a comparison of the school and other expenditures of the twenty-six States that consti-

tute the German Empire. This showing is naturally a better one than is commonly supposed, inasmuch as the expenditures of the central governments for public education in Germany are often compared with those of other lands, in disregard of provincial and municipal expenditures for school purposes. The same central authority in Germany, giving a résumé of school attendance in all of the lower schools and other related matters, reports that the number of pupils in the elementary schools (ages 6 to 14) was 9,779,356, or 94 per cent of all children of school age, about 6 per cent being taught in middle, secondary, and private schools. The reports summarized relate chiefly to the year 1906. Since 1901 the daily attendance shows an increase of 9.1 per cent. During the same period the number of men teachers increased 10.6 per cent, that of women teachers 30.5 per cent. The annual cost per pupil in public elementary schools increased from \$11.20 in 1901 to \$12.86 in 1906, according to the latest quinquennial report. The average number of pupils to each teacher in 1906 was 58.

Especially worthy of note is the legislative activity shown in Prussia, Württemberg, Oldenburg, Saxony, Saxe-Weimar, and other States. Where formerly the administration and supervision of schools was mainly based on ministerial orders, attempts are now made to pass laws which embody the modern spirit and the latest pedagogical experience. In particular, legislative bodies have taken cognizance of the necessity of giving the schools professional supervision in cities together with the related question of denominational instruction. Teachers' salaries also have been the subject of legislative enactment in several States of Germany. The new salary law in Prussia, though not altogether satisfactory to the teachers, is a great step in advance. Social games on playgrounds and school gardens, parents' meetings, school savings banks, school kitchens, and manual training halls are among the newer interests which center in the school system. School physicians give attention to diseased pupils. In so doing they have entered upon the establishment of forest schools and open-air colonies for sickly children. Elsewhere in this report are given accounts of schools for weak-minded children, of the number of cripples, of the care of dependent and criminally inclined children, of the feeding of hungry school children, of the cost of caring for children's teeth, and other humanitarian interests.

Steps have been taken toward enlarging the usefulness of continuation (day and evening) schools. There are three kinds of continuation school in Germany—industrial, commercial, and agricultural. These schools are subsidized by nearly all of the States. In many States attendance is obligatory, but there is still a large number of voluntary schools of this kind. While many are directly vocational, the greater number of them are vocational only in part.

Secondary and higher institutions of learning are not falling behind in the general forward movement. While the schools without Latin and Greek are increasing rapidly, the classical schools are by no means decreasing. New foundations, such as the Colonial Institute at Hamburg, the Commercial University at Cologne, the Polytechnicum at Dantzic, show that a variety of institution is needed to satisfy the varied needs and wishes of the people. Sharp differences of opinion, such as characterize all living institutions, appear in the resolutions of professors recently passed at a meeting at Jena, concerning the liberty to teach; and in the rejection of a petition for the establishment of chairs of pedagogy in Bavaria on the ground "that pedagogy as a university discipline would presuppose universal knowledge in its representative, which is manifestly an impossibility."

SPANISH AMERICA.

The modernizing tendency in education in Spanish South America, which was noticed somewhat fully in the last report, is further manifested in the reports which have reached this bureau within the past year. The report of the Chilean minister of public instruction shows that more and more attention is now given to practical branches of instruction in the schools, as well as in the higher institutions. In the latter, for example, special attention is to be paid to the chemistry and technology of saltpeter, in which Chile is remarkably rich; while manual training has been introduced into the schools, and the spirit of the instruction generally, as revealed in the report, is inspired by a desire and determination to prepare the present rising generation in Chile for an active business life.

The same observation applies to the report of the minister of public instruction of Guatemala, the programmes of instruction which he publishes all showing a decided preponderance of the scientific, technical, and commercial over the literary branches. The minister takes occasion to insist upon the importance of a good knowledge of English, in view of the increased intercourse which the new railway will open with English-speaking people. Teachers in the public schools are required to know and teach English. This is one of the many indications that English is becoming the principal international language of the commercial world.

The Fifth Pan-American Medical Congress met at Guatemala on the 6th of August, 1908. It is interesting to note that a number of the papers presented were from physicians in all parts of the United States, showing that the interest in the congress was widespread among the American medical profession.

Prof. L. S. Rowe, of the University of Pennsylvania, has made studies of the condition of education in South American countries during visits to the various Spanish Republics and has given the

results of some of his observations in a valuable paper which is published in this report under the title "Educational progress in the Argentine Republic and Chile."

THE BUREAU OF EDUCATION.

9. The Bureau of Education has now been removed from the rented building at the corner of Eighth and G streets, which it had occupied for a generation or more, to somewhat larger and much more comfortable quarters in the old Post-Office Department building, between Seventh and Eighth and E and F streets northwest. Mr. Lewis A. Kalbach, who had served as clerk to the commissioner, has been made chief clerk of the bureau; Prof. James E. McClintock, of the University of Maine, has been appointed specialist in land-grant college statistics, his principal work having to do with the relations of this office with the colleges of agriculture and mechanic arts; Dr. Harlan Updegraff, chief of the Alaska division, has been appointed collector and compiler of statistics, succeeding Mr. W. Dawson Johnston, who has become librarian of Columbia University. These two specialists are to spend a portion of their time in the field, with a view to becoming intimately acquainted with such needs as the bureau may properly serve. Dr. John D. Wolcott has been made acting librarian.

An inventory of the library, the first of which we have record, was taken on the occasion of its removal to the new quarters. It was found to contain 47,230 bound volumes and approximately 80,000 pieces of unbound material.

Arrangements have been made with the Bureau of the Census for the collection, by its experts in the field, of financial statistics of the school systems of the larger cities. The statistical blank used by the Census Office for the purpose has been prepared by that office and the Bureau of Education in cooperation, and will be used jointly by the two offices. Copies will be furnished this year by the Bureau of Education to cities that can not be reached by the census agents.

Mr. William T. Lopp, who has served as district superintendent of schools in Alaska, has been appointed superintendent of the education of natives of Alaska, including the reindeer industry. The bureau maintained 69 United States public schools in Alaska during the year 1908-9, with 89 teachers and an enrollment of 3,809 pupils. Nine physicians have been employed in widely scattered localities, whose chief duties are to introduce sanitary methods of living, to collect vital statistics regarding the natives, and to furnish medical relief. In communities having no physicians, the teachers of 29 of the United States public schools administer nonprofessional aid in sickness, for which purpose they are furnished with medical supplies and text-books. The schools for natives of Alaska are now generally equipped for instruction in the industries and in domestic economy.

The correspondence division, of which Mr. Lovick Pierce is chief, has distributed during the year 143,315 copies of the publications of this office. Provision was made by the last Congress for the employment of an editor of the bureau's publications. A civil-service examination will be held in the near future for the purpose of filling this position.

The topics which have been touched upon above and many others are treated more at length in the following chapters. In spite of the foresight which has been exercised and the pains taken in the preparation of these chapters, some portions have necessarily been prepared in haste. In some instances it has been found necessary to depend upon second-hand materials, and subjects of importance have been passed over because reliable information of any kind has as yet failed to reach this office. We must, accordingly, still ask indulgence for possible inaccuracies and omissions. It is believed that the information here presented, which is for the most part drawn from official publications, will be found to be substantially correct. The reorganization of such a report, however, with a view to making it fairly represent the most recent tendencies and developments, is not a thing to be fully accomplished in a year or even in two. Criticism of both the methods and the materials of this report is invited, and it is confidently believed that that of the next year will show as great an improvement over the volume here presented as it is believed this report will show in comparison with that of a year ago.

All of which is respectfully submitted.

ELMER ELLSWORTH BROWN,
Commissioner.

THE SECRETARY OF THE INTERIOR.

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CHAPTER I.

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I. EDUCATIONAL BOARDS AND COMMISSIONS.

GENERAL EDUCATION BOARD.

The activities of this board during the current year are in some degree indicated by the following statement, giving a general view of the principal, income, and expenditure of the different funds under the jurisdiction of the board for the year ending June 30, 1909:

(1) *John D. Rockefeller special fund* (subject to order of Mr. Rockefeller).—The principal of this fund amounted to \$16,955,841. The income (including balance and amount accrued but not yet paid) was \$959,714. Gifts to institutions were: University of Chicago, \$265,739; Rockefeller Institute for Medical Research, \$213,125.

(2) *John D. Rockefeller general fund*.—Principal: Original gift, \$10,667,918; reserve, \$240,438; total, \$10,908,356. Income account:

Balance July 1, 1908, \$553,186; income during the year (including amount accrued but not yet received, and excluding \$149,886 carried to reserve fund), \$480,056, making a total net income of \$1,033,242. Of this, \$759,419 was invested in bonds and stocks; the amount receivable but not paid was \$107,763; the \$7,398 expenses and the balance in hand accounted for the remainder.

(3) *John D. Rockefeller foundation fund*.—Principal: Original gift, \$10,000,000; reserve, \$672,870; total, \$10,672,870. Income account: Balance July 1, 1908, \$882,533; income during the year (including amount accrued but not yet paid, and excluding \$243,857 carried to reserve), \$450,000, making a total net income of \$1,332,533.

Payments made on account of appropriations.

Bowdoin College	Balance	\$20,595.64
Beloit College	In full	50,000.00
Coe College	On account	7,133.08
Colorado College	Balance	4,200.02
Drury College	In full	50,000.00
Hamilton College	In full	50,000.00
Harvard University	On account	10,775.00
Iowa College	In full	100,000.00
Lafayette College	On account	31,406.40
Mercer University	On account	21,333.33
Princeton University	On account	34,777.77
Maryville College	On account	26,667.50
Randolph-Macon College	On account	1,301.40
Richmond College	On account	30,000.00
Smith College	In full	12,500.00
University of Rochester	On account	30,000.00
University of Wooster	On account	100,188.50
University of Virginia	In full	50,000.00
Washburn College	On account	7,473.56
Wabash College	On account	25,598.93
Wake Forest College	On account	4,577.62
Wofford College	On account	3,371.88
Yale University	On account	74,334.06
Total		746,234.69

The remainder of the income is accounted for as follows: Expenses, \$10,209; investments, \$310,791; income receivable, \$91,554; balance in hand, \$173,744.

(4) *John D. Rockefeller annuity fund*.—Receipts: Balance July 1, 1908, \$11,766; received from Mr. Rockefeller on account of pledge, \$150,000; interest, \$472; total, \$162,238.

Disbursements: Payments and appropriations for farmers' cooperative demonstration work in Mississippi, Florida, Virginia, North Carolina, Georgia, South Carolina, and Alabama (including \$4,259 expenses of administration), \$68,242; payments and appropriations for salaries and expenses of professors of secondary education in nine southern state universities (including \$3,000 to the Louisiana state department of education and \$237 to the Conference for Education in the South), \$21,240; payments and appropriations to Howe Insti-

tute, Howard College, Kentucky State University, Americus Institute, Waters Normal Institute, Walker Baptist Institute, Mississippi College, Spelman Seminary, Tuskegee Institute, and Hampton Institute, \$48,308; to Southern Education Board, \$10,000; expenses and balance, \$14,448.

(5) *Anna T. Jeanes fund*.—Principal, \$200,000; income, \$10,566. Requisitions from Messrs. H. B. Frissell and Booker T. Washington approved and paid, \$9,368.

(6) *John D. Rockefeller gift of March 23, 1906*.—Amount of gift, \$250,000; income, \$16,236; paid to Spelman Seminary, \$12,000.

(7) *Rockefeller Institute for Medical Research*.—Principal of fund, \$2,621,105; income, \$158,369; amount forwarded to treasurer of institute, \$124,000.

The above statement shows that on June 30, 1909, the principal of the three larger funds under the control of that board, known as the "special," the "general," and the "foundation" fund, aggregated \$38,537,066.66, a net increase of \$223,966.37 over the preceding year. The available income account of the three funds amounted to \$3,325,489.21. Appropriations aggregating \$746,234.69 were made to 23 universities and colleges in sums ranging from \$1,300 to \$100,000. From the income, investments were made and added to the capital to the amount of \$1,206,197.11. After expenses were paid there were balances on hand aggregating about \$500,000.

The latest gift of Mr. Rockefeller, amounting to \$10,000,000, was made July 7, 1909, subsequent to the close of the fiscal year of the board, and consequently is not included in the above statement.

CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING.

Two new features were incorporated in the rules of the Carnegie Foundation during the year covered by the Third Annual Report of President Pritchett (Oct. 1, 1907–Sept. 30, 1908), namely: The maximum amount of a retiring allowance was raised from \$3,000 to \$4,000 and a certain provision was made for widows' pensions by the adoption of the following rule:

Any person who has been for ten years the wife of a professor either in receipt of a pension or entitled to receive one shall receive during her widowhood one-half of the allowance to which her husband was entitled.

Pensions to widows had previously been only permissive. The executive committee have ruled that a widow's pension ceases upon remarriage.

During the year 78 names were added to the retiring-allowance roll, at a total cost of \$113,765. Of these 39 were professors in accepted institutions and 24 in institutions not on the accepted list, while 15 were widows of professors. Thirteen persons in the retired

list died during the year and 2 temporary allowances were discontinued, so that the total addition to the list was 63 names.

The total number of retiring allowances in force September 30, 1908, was 211, as follows: One hundred and sixteen to professors in accepted institutions, 66 to professors not in accepted institutions, and 29 to widows. The increase for the year was 63. The total grant in force was \$303,505, being greater by \$101,360 than at the close of the preceding year.

The geographical distribution of retiring allowances was as follows: North Atlantic division, 104; South Atlantic division, 24; South Central division, 20; North Central division, 51; Western division, 5; Canada, 5; Newfoundland, 2.

Seven institutions were admitted to the privileges of the retiring allowance system during the year, as follows: Bowdoin College, the Central University of Kentucky, Drake University, Drury College, Franklin College, Rose Polytechnic Institute, and the University of Cincinnati.

Upon the subject of the exchange of teachers between Prussia and the United States President Pritchett has to remark:

In response to a request from the minister of instruction of Prussia, the trustees voted at their meeting on November 20, 1907, to authorize the president of the foundation to act as the agency in America for an exchange of teachers of English between the United States and Prussia. * * *

Although the exchange has scarcely more than begun, several matters have developed respecting it to which it seems desirable to call attention.

In Prussia a very large number of well-qualified teachers applied for the opportunity to exchange, and a large number of gymnasia asked for the assignment of American teachers.

In the United States a considerable number of teachers applied, nearly all of whom were from the Central West. Very few applications came from New England, New York, or the Atlantic States, a result somewhat disappointing. This, however, was not so disconcerting as the lack of high schools or undergraduate colleges desiring to take, at the small expense involved, a German teacher. This arose, I am inclined to believe, from a misconception of the plan itself. * * *

The trustees may have noted that the inauguration of this exchange precipitated in English and German periodicals an amusing discussion as to whether Americans ought to be chosen to teach the English language. The fitness of Americans to teach English was warmly defended by Professor Brandl and other German university professors who had visited the United States.

To the absence of uniformity in college financial reports is chiefly due the difficulty the foundation has met with in presenting comparative college statistics. Absolute uniformity, the president says, is probably impossible, and perhaps undesirable, but he gives a form of financial statement containing the more simple and fundamental items in which the public is interested and which are needed in the study of educational administration, to be incorporated in the finan-

cial report of each institution, whatever form such report might in other respects take.

The question of the admission of tax-supported and state-controlled institutions to the accepted list had been constantly before the trustees during the two years of the foundation's administration. On the ground of established public policy it seemed altogether desirable that retiring allowances should be established in tax-supported colleges and universities by the States which governed and supported them. On the other hand, considering the interests of education, it appeared to be a misfortune to divide the colleges and universities of the country into two groups separated by the line of state support. President Pritchett disposed of the argument respecting the conflicting claims of a divided allegiance between the state college and the foundation by stating that no such case could arise.

Once a college has been admitted to the privileges of the retiring allowance system, its professors receive their retiring allowances through the college exactly as they receive their salaries. They have no occasion to know the foundation in the matter.

In view of all the considerations, Mr. Carnegie made to the trustees of the foundation the offer contained in the following letter addressed to the president of the foundation and dated March 31, 1908:

DEAR SIR: Your favor of to-day informs me of the desire of the professors of state universities to be embraced in the pension fund, as shown by a resolution unanimously adopted by their national association.

In my letter of April 16, 1905, handing over the fund to my trustees, the following occurs: "We have, however, to recognize that state and colonial governments which have established or mainly supported universities, colleges, or schools may prefer that their relations shall remain exclusively with the State. I can not, therefore, presume to include them."

I beg now to say that should the governing boards of any state universities apply for participation in the fund and the legislature and governor of the State approve such application, it will give me great pleasure to increase the fund to the extent necessary to admit them. I understand from you that if all the state universities should apply and be admitted five millions more of 5 per cent bonds would be required, making the fund \$15,000,000 in all.

From the numerous letters I have received from pensioners and their wives and the warm approval of the press and the public, I am satisfied that this fund is, and must be for all time, productive of lasting good, not only to the recipients, but to the cause of higher education.

Most grateful am I to be privileged as trustee of this wealth to devote it to such use.

Truly, yours,

ANDREW CARNEGIE.

At a special meeting, held May 7, 1908, the trustees voted unanimously to accept the offer of Mr. Carnegie to supply the \$5,000,000 of additional endowment.

An abstract of an address by President Pritchett, setting forth the principles upon which the administration of the foundation is conducted, etc., is given on page 138 of this volume.

THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING AND
THE GEORGE WASHINGTON UNIVERSITY.

The following letter, reprinted from *Science* (June 18, 1909), was addressed by the president of the Carnegie Foundation for the Advancement of Teaching to the president of the George Washington University:

JUNE 4, 1909.

President CHARLES W. NEEDHAM,

The George Washington University, Washington, D. C.

DEAR SIR: I am directed by the executive committee of the Carnegie Foundation for the Advancement of Teaching to send to you, as president of the George Washington University, the following communication:

The George Washington University reported to the foundation a productive endowment of \$219,832.96 as of date August 21, 1907. In the financial statement submitted some time since it reported as of date October 3, 1908, a productive endowment of \$123,500.

The rules of the Carnegie Foundation require that an institution, to be entitled to the privileges of the retiring-allowance system, must have a productive endowment of not less than \$200,000. This proviso was made because experience has proved that no college can maintain fair educational standards without adequate endowment.

The examination which I have just caused to be made of the George Washington University shows that its announced standards of admission to the various schools are not enforced.

In the college division of the university regular students are admitted with reasonable regard to the stated admission requirements, but of the total enrollment more than one-third are special students. The value of the A. B. degree, however, is seriously lowered by the lax administration of the college of political sciences and the division of education, to which admission is granted with little regard to the published entrance requirements. The law school announces a four-year high-school education as a prerequisite for admission, but does not enforce it. Similarly in the medical school the announced requirements for admission have been repeatedly evaded. If the entrance requirements to this school were actually enforced, the enrollment would be so greatly reduced that the department could not continue—a result, I may add, entirely in the interest of medical education, since the District of Columbia and the region about it are oversupplied not only with physicians, but with weak medical schools.

The executive committee feels compelled also to protest against the extraordinary action of the institution in forcibly retiring two professors, both of whom are in the prime of their active teaching, on the ground that the institution needs to save money by the retiring-allowance system, but it is entirely contrary to the spirit in which this foundation was conceived and is a blow at academic dignity and academic freedom.

The committee further calls your attention to the extract from the rules for the admission of institutions: "The trustees of the Carnegie Foundation for the Advancement of Teaching reserve the right to discontinue the privilege of participation in the system of retiring allowances of the foundation whenever, in

the judgment of the trustees, an institution ceases to conform to the regulations maintained by the trustees: Such withdrawal shall not, however, result in the discontinuance of retiring allowance already granted."

The executive committee, by virtue of the authority conferred upon it under the by-laws, in view of the conditions existing in the George Washington University referred to above, conditions which are entirely out of harmony with the educational ideals for which the foundation stands, informs you with great regret that the relation of the George Washington University as an accepted institution is terminated with this date.

Very truly, yours,

HENRY S. PRITCHETT,

President.

The foregoing letter called forth a detailed statement by President Needham of the plans and work of the George Washington University, which was published in *Science*, June 25, 1909. Those portions of the statement that deal more directly with the points raised by President Pritchett are as follows:

In regard to the pensioning of teachers, so far as I understand it, it has always been construed where a pension system existed that when a professor has become entitled to a pension, either by length of service or by age limit, he has the right to retire voluntarily at any time, and the university has the equal right to retire him when for any cause it seems expedient to do so. In the recent action it became necessary to reduce the expenses about \$25,000 and to distribute that retrenchment among each of the departments of the university. Of necessity the services of some of the teachers had to be dispensed with, and in selecting the ones to be retained, all things being equal, it was natural to retain those who were thoroughly in harmony with the general plans and development of the university.

The action of the Carnegie Foundation in assuming that the university had no option but could retire only those eligible who voluntarily sought retirement seems to be contrary to the usual construction of pension systems. Waiving this point, however, their action in our case was hasty and arbitrary. * * *

The productive investments in 1900 were \$223,509.65. In 1908 they were \$127,740.91. This change in the productive assets was caused by the drain upon the funds occasioned by the increase in the cost of maintaining the university. The contributions toward the current expenses were insufficient to meet the annual deficit, and thus funds which were properly applicable had to be used to pay the salaries and current expenses or close the doors to progress.

ACTION OF STATE LEGISLATURES REGARDING CARNEGIE PENSIONS.

A joint resolution of 1909 of the Idaho legislature approves the application of the regents to have the University of Idaho placed upon the accepted list of institutions eligible to receive the benefits of the Carnegie Foundation for the Advancement of Teaching.

Act No. 241 of the legislature of South Carolina, approved March 1, 1909, authorizes the trustees of all institutions of higher learning supported in whole or in part by the State of South Carolina to secure the benefits of the retiring funds for their teachers.

A joint resolution of the legislature of Vermont, approved January 15, 1909, authorizes and instructs the board of trustees of the University of Vermont and State Agricultural College to accept the benefits of the retiring fund of the Carnegie Foundation for the Advancement of Teaching.

Resolutions to similar effect were passed by the legislatures of a number of other States, including California, Illinois, Massachusetts, Michigan, and New Hampshire.

THE RUSSELL SAGE FOUNDATION.

In 1907 Mrs. Russell Sage, of New York City, gave to a board of trustees the sum of \$10,000,000 for the improvement of social and living conditions in the United States of America. The scope of the foundation as defined by the trustees at one of their earliest meetings is as follows:

(a) The foundation will not attempt to relieve individual or family need. Its function is to eradicate so far as possible the causes of poverty and ignorance, rather than to relieve the sufferings of those who are poor or ignorant. Not that it is not a noble work to relieve suffering, however caused, but that if the foundation should attempt to relieve such suffering there would be nothing left with which to perform the higher function of trying to prevent its existence. There is another equally cogent reason for this conclusion. The relief of individual need is not one of the "larger and more difficult problems." It is a duty which every one of us who is more prosperous owes to our less prosperous neighbor. Every neighborhood should relieve its own cases of individual need for its own sake, and every neighborhood is measurably meeting this obligation. The sources of neighborly charity would be dried up if such needs were supplied from without.

(b) The sphere of higher education, that served by our universities and colleges, is not within the scope of the foundation. It is sufficiently cared for by the General Education Board. Not so, however, elementary education of the kind that directly affects social and living conditions, e. g., industrial education, education in the household arts, training of charity workers, etc.

(c) Aid to churches for church purposes, whatever their denomination, is not within the scope of the foundation.

Among the propagandist movements to which the foundation has contributed both direction and financial support are the following: Prevention of tuberculosis; playground extension; care of children; children's school gardens; charity organization extension; and prevention of blindness. Among other work that has been fostered by the foundation are the following: A study of the causes of slow progress among school children; the schools in Boston, New York, Chicago, and St. Louis have been given the means to establish departments for social investigation. Among the publications issued by the foundation are *First Steps in Organizing Playgrounds*, by Lee F. Hanmer; *The Field Day and Play Picnic for Country Children*, by Myron T. Scudder; *Medical Inspection of Schools*, by Luther H. Gulick and Leonard P. Ayres.

FEDERAL COMMISSION ON COUNTRY LIFE.

On August 10, 1908, the President of the United States appointed a commission of five members, afterwards increased to seven members, to investigate and report to him "upon the present condition of country life, upon what means are now available for supplying the deficiencies which exist, and upon the best methods of organized permanent effort in investigation and actual work" along the lines of betterment of rural conditions. The field of inquiry covered by the commission included the general social, economic, sanitary, educational, and labor conditions of the open country. The investigation was conducted by means of circular letters of inquiry sent to about 550,000 persons, and through public hearings held by the commission at thirty places throughout the United States. The commission rendered its report to the President on January 23, 1909, who transmitted it to Congress on February 9, 1909. It was printed as Senate Document No. 705, Sixtieth Congress, second session.

Among the reasons ascribed by the commission for the lack of a highly organized rural society is a "lack of good training for country life in the schools." Respecting this phase of the investigation the commission reports as follows:

The subject of paramount importance in our correspondence and in the hearings is education. In every part of the United States there seems to be one mind, on the part of those capable of judging, on the necessity of redirecting the rural schools. There is no such unanimity on any other subject. It is remarkable with what similarity of phrase the subject has been discussed in all parts of the country before the commission. Everywhere there is a demand that education have relation to living, that the schools should express the daily life, and that in the rural districts they should educate by means of agriculture and country life subjects. It is recognized that all difficulties resolve themselves in the end into a question of education.

The schools are held to be largely responsible for ineffective farming, lack of ideals, and the drift to town. This is not because the rural schools, as a whole, are declining, but because they are in a state of arrested development and have not yet put themselves in consonance with all the recently changed conditions of life. The very forces that have built up the city and town school have caused the neglect of the country school. It is probable that the farming population will willingly support better schools as soon as it becomes convinced that the schools will really be changed in such a way as to teach persons how to live.

The country communities are in need of social centers—places where persons may naturally meet, and where a real neighborhood interest exists. There is difference of opinion as to where this center should be, some persons thinking it should be in the town or village, others the library, others the church or school or grange hall. It is probable that more than one social center should develop in large and prosperous communities. Inasmuch as the school is supported by public funds, and is therefore an institution connected with the government of the community, it should form a natural organic center. If the school develops such a center, it must concern itself directly with the interests of the people.

It is difficult to make people understand what this really means, for school-teaching is burdened with tradition. The school must express the best cooperation of all social and economic forces that make for the welfare of the community. Merely to add new studies will not meet the need, although it may break the ground for new ideas. The school must be fundamentally redirected, until it becomes a new kind of institution. This will require that the teacher himself be a part of the community and not a migratory factor.

The feeling that agriculture must color the work of rural public schools is beginning to express itself in the interest in nature study, in the introduction of classes in agriculture in high schools and elsewhere, and in the establishment of separate or special schools to teach farm and home subjects. These agencies will help to bring about the complete reconstruction of which we have been speaking. It is specially important that we make the most of the existing public-school system, for it is this very system that should serve the real needs of the people. The real needs of the people are not alone the arts by which they make a living, but the whole range of their customary activities. As the home is the center of our civilization, so the home subjects should be the center of every school.

The most necessary thing now to be done for public-school education in terms of country life is to arouse all the people to the necessity of such education, to coordinate the forces that are beginning to operate, and to project the work beyond the schools for youth into continuation schools for adults. The schools must represent and express the community in which they stand, although, of course, they should not be confined to the community. They should teach health and sanitation, even if it is necessary to modify the customary teaching of physiology. The teaching should be visual, direct, and applicable. Of course the whole tendency of the schools will be ethical if they teach the vital subjects truthfully; but particular care should be taken that they stand for the morals of the pupils and of the communities.

We find a general demand for federal encouragement in educational propaganda to be in some way cooperative with the States. The people realize that the incubus of ignorance and inertia is so heavy and so widespread as to constitute a national danger, and that it should be removed as rapidly as possible. It will be increasingly necessary for the national and state governments to cooperate to bring about the results that are needed in agricultural and other industrial education.

The consideration of the educational problem raises the greatest single question that has come before the commission, and which the commission has to place before the American people. Education has now come to have vastly more significance than the mere establishing and maintaining of schools. The education motive has been taken into all kinds of work with the people, directly in their homes and on their farms, and it reaches mature persons as well as youths. Beyond and behind all educational work there must be an aroused intelligent public sentiment; to make this sentiment is the most important work immediately before us. The whole country is alive with educational activity. While this activity may all be good, it nevertheless needs to be directed and correlated, and all the agencies should be more or less federated.

The arousing of the people must be accomplished in terms of their daily lives or of their welfare. For the country people this means that it must be largely in terms of agriculture. Some of the colleges of agriculture are now doing this kind of work effectively, although on a pitifully small scale as compared with the needs. This is extension work, by which is meant all kinds of educational effort directly with the people, both old and young, at their homes and on their farms; it comprises all educational work that is conducted away from the

institution and for those who can not go to schools and colleges. The best extension work now proceeding in this country—if measured by the effort to reach the people in their homes and on their own ground—is that coming from some of the colleges of agriculture and the United States Department of Agriculture. Within the last five or ten years the colleges of agriculture have been able to attack the problem of rural life in a new way. This extension work includes such efforts as local agricultural surveys, demonstrations on farms, nature study, and other work in schools, boys' and girls' clubs of many kinds, crop organizations, redirection of rural societies, reading clubs, library extension, lectures, traveling schools, farmers' institutes, inspections of herds, barns, crops, orchards, and farms, publications of many kinds, and similar educational effort directly in the field.

To accomplish these ends we suggest the establishment of a nation-wide extension work. The first, or original, work of the agricultural branches of the land-grant colleges was academic in the old sense; later there was added the great field of experiment and research; there now should be added the third coordinate branch, comprising extension work, without which no college of agriculture can adequately serve its State. It is to the extension department of these colleges, if properly conducted, that we must now look for the most effective rousing of the people on the land.

In order that all public educational work in the United States may be adequately studied and guided, we also recommend that the United States Bureau of Education be enlarged and supported in such a way that it will really represent the educational activities of the nation, becoming a clearing house, and a collecting, distributing, and investigating organization. It is now wholly inadequate to accomplish these ends. In a country in which education is said to be the national religion, this condition of our one expressly federal educational agency is pathetic. The good use already made of the small appropriations provided for the bureau shows clearly that it can render a most important service if sufficient funds are made available for its use.

It is of the greatest consequence that the people of the open country should learn to work together, not only for the purpose of forwarding their economic interests and of competing with other men who are organized, but also to develop themselves and to establish an effective community spirit. This effort should be a genuinely cooperative or common effort in which all the associated persons have a voice in the management of the organization and share proportionately in its benefits. Many of the so-called "cooperative" organizations are really not such, for they are likely to be controlled in the interest of a few persons rather than for all and with no thought of the good of the community at large. Some of the societies that are cooperative in name are really strong centralized corporations or stock companies that have no greater interest in the welfare of the patrons than other corporations have.

At present the cooperative spirit works itself out chiefly in business organizations devoted to selling and buying. So far as possible, these business organizations should have more or less social uses.

The commission consisted of Prof. L. H. Bailey, New York State College of Agriculture, Ithaca, N. Y., chairman; Mr. Henry Wallace, Wallace's Farmer, Des Moines, Iowa; President Kenyon L. Butterfield, Massachusetts Agricultural College, Amherst, Mass.; Mr. Gifford Pinchot, United States Forest Service; Mr. Walter H. Page, editor of the *World's Work*, New York City; Mr. Charles S. Barrett, Georgia; and Mr. William A. Beard, California.

COMMISSION ON STUDY PREPARATORY TO THE THEOLOGICAL SEMINARY.

In Chicago, on February 10, a joint session was held of the department of universities and colleges, department of theological seminaries, and department of churches and pastors of the Religious Education Association, with the Interdenominational Conference of Church and Guild Workers in State Universities. The following resolution was adopted:

That a commission of twelve be appointed, representing endowed institutions of advanced education as well as state universities, for the purpose of formulating an ideal or suggestive course of collegiate study preparatory to a course in a theological seminary.

The commission is constituted as follows: Dean Shailer Mathews, University of Chicago, chairman; Prof. George A. Coe, Northwestern; President Ozora Davis, Chicago Theological Seminary; President R. A. Falconer, University of Toronto; President W. H. P. Faunce, Brown; President Emory W. Hunt, Denison; President Edmund J. James, University of Illinois; Prof. Francis W. Kelsey, University of Michigan; President Henry C. King, Oberlin; President William Douglas Mackenzie, Hartford Theological Seminary; President George B. Stewart, Auburn Theological Seminary; Chancellor Frank Strong, University of Kansas.

SPECIAL EDUCATIONAL COMMISSION—CONNECTICUT.

In 1907 the general assembly of Connecticut by an act continued the joint committee on education and directed them to investigate the public school system of the State and to make a report to the general assembly of 1909. Immediately after this action the joint committee met and designated five of their number to carry out the provisions of the continuing act.

In their report, published by order of the general assembly in 1909, the special commissioners give the results of their investigations, which are summed up in twenty-two recommendations:

1. That after a certain date the present "district system" be abolished; that town school committees be elected; and that the towns be grouped so as to constitute territories for convenient supervision.
2. That territorial supervisors be elected or appointed substantially in accordance with the provisions of Chapter X of the Connecticut School Laws, their duties to be prescribed by the state board.
3. That as a part of their duties the supervisors shall prescribe examinations suited to pupils in the eighth or higher grades, and issue to pupils satisfactorily passing these examinations diplomas certifying to their attainments.
4. That after a certain date no teacher, not approved by the state board of education, shall be appointed to teach school in the State.

5. That the provisions of the average attendance grant be extended so that in no town shall there be less than \$25 expended annually for each pupil in average attendance in providing for his education.

6. That after a certain date no school shall be maintained in any town in the State in which the average attendance shall fall below twelve pupils, and pupils belonging to such discontinued schools must be carried to some central school, according to the provisions of section 48 of the school laws.

7. That the means provided for transportation of children to and from school must be approved by the territorial supervisor.

8. That section 169 of the Connecticut School Laws be amended so that the schoolhouses and outbuildings must be maintained in a condition satisfactory to the territorial supervisor.

9. That pupils may attend the school that is nearest their places of residence, and in all such cases in which the nearest school is in an adjoining town the town in which they reside shall pay their pro rata tuition.

10. That the attention of the state board of education be called to the fact that children between 14 and 16 years of age are not exempt from school attendance under the law unless actually employed at labor.

11. That section 38 be amended so that all the public schools shall be maintained for at least thirty-eight weeks in each year.

12. That there shall be established cash scholarships in the normal schools of the State for promising pupils selected by competitive examination, the beneficiaries to sign a contract to teach for five years in any school to which they are assigned by the state board.

13. That after a certain date the school committee in every town in which free text-books are not supplied shall purchase text-books and other school supplies used in the public schools, and, subject to such regulations as to their care and custody as it may prescribe, loan them to the pupils of such schools free of charge, and, if instruction is given therein in the use of tools and cooking, may so purchase and loan the tools, implements, and materials necessary therefor; and no text-books not approved by the state board of education shall be used.

14. That the state board of education be authorized to make provision for the teaching of agriculture in the normal schools in the State.

15. That after a certain date the course of study in the rural schools shall include the elements of agriculture.

16. That provision be made for instruction, in the academies and high schools of the State, in the science and practice of common school teaching, under a course to be prescribed by the state board of education.

17. That line 6 of section 76 of the Connecticut School Laws, relating to evening schools, be amended by striking out the word "one," so that instruction in any study usually taught in a high school may be given on petition of at least 20 persons over 14 years of age competent to pursue high-school studies.

18. That no person who is related by blood or marriage to any member of the school committee of any town shall be employed as a teacher by such committee, except upon the consent of two-thirds of the members thereof.

19. That it shall be the duty of the principal or other person in charge of every public school having more than 100 pupils to instruct and train the pupils by means of drills, so that they may in a sudden emergency be able to leave the school building in the shortest possible time and without confusion or panic, and that such drills or rapid dismissals shall be held at least once in each month.

20. That every teacher, before entering upon the school duties of the year, shall be required to take a suitable oath of office.

21. That the school committee of any city or town may retire from active service and place upon the pension roll any teacher of such city or town who is 60 years old or over, or is, in the judgment of said committee, incapacitated for useful service, and who has faithfully served in the State for twenty-five years: *Provided*, That the expense so incurred by the town shall not be computed as part of the school expense in determining eligibility to benefits of the average-attendance grant.

22. That it shall be the duty of the state board of education to prepare, for the use of the public schools of the State, a programme providing for a salute to the flag at the opening of each day of school, and such other patriotic exercises as may be deemed by the board to be expedient, under such regulations and instructions as may best meet the varied requirements of the different grades in such schools.

IOWA EDUCATIONAL COMMISSION.

The educational commission of Iowa, the appointment of which was noted in Chapter I of the commissioner's report for 1908, submitted its report to the general assembly in January, 1909. A thorough codification of the school laws was made, and numerous important changes were suggested. Among the more important recommendations, as contained in the proposed new school code, were the following:

1. That the county be made the unit of school control, and that a county board of education exercise supervision over the public schools.

2. That provision be made for the consolidation, or dissolution, of small rural districts.

3. That standards determining the character of district schools be fixed and maintained.

4. That county superintendents be elected by county boards of education, that they need not be residents of the respective counties in which they are to serve, and that the salary paid in no case be less than \$1,250.

5. That the office of school treasurer be abolished, and that the county treasurer receive and disburse all school funds.

6. That the title "State Board of Educational Examiners" be changed to "State Board of Education," and that its powers be enlarged and its facilities for supervision be increased.

7. That the public schools of the State be thoroughly classified and the character of work prescribed, so that the terms "common school," "graded school," "high school," etc., may be well defined and understood.

8. That the method of certification of teachers be changed, to the end that standards of qualifications of teachers may be raised.

9. That legal sanction be given to the employment of teachers for a longer term than one year.

10. That a state supervisor of public-school libraries be employed.

11. That local school boards be permitted, if they see fit, to provide medical inspection for schools within their districts.

Some general recommendations, not embodied in the proposed code, were made. Among these was the suggestion that a special commis-

sion be appointed to supplement the work of the present commission. Questions suggested for the consideration of such a special commission were:

The establishment of a sufficient number of normal schools to provide adequate professional training for all the teachers in the rural and graded schools; the organization and determination of the scope of the higher educational institutions; the provision of day schools for the deaf and blind in connection with existing public schools so as to afford opportunity for school education and also retain home advantages; the possible organization of the present schools for the deaf, blind, and incorrigibles as a part of the public-school system so as to secure more expert professional teaching in addition to the excellent business organization of the present; the possible incorporation of the state library commission under the state board of education; special state aid for high schools, graded and rural schools that maintain definite standards of work and efficiency.

A constitutional amendment providing for the election of the state superintendent of public instruction by the state board of education was also suggested.

BOARD FOR THE GOVERNMENT OF HIGHER STATE INSTITUTIONS, IOWA.

By an act of the legislature of Iowa, approved March 29, 1909, the board of regents and the boards of trustees charged with the government of the state university, the college of agriculture and mechanic arts, and the normal school, were abolished on July 1, 1909, and the government of those institutions was committed to a board of education consisting of nine members appointed by the governor with the consent of the senate. Not more than five members of the board shall be of the same political party, and not more than three alumni of the above-mentioned institutions and but one alumnus from each institution may be members of the board at any one time. Appointments subsequent to the first appointments shall be for a period of six years, and three members shall be appointed every second year. The board shall meet four times a year, and special meetings may be called. Each member of the board is allowed \$7 for each day he is actually engaged in the performance of his official duties, not exceeding sixty days in any one year, and mileage at the rate of 2 cents per mile of necessary travel. The board has power to elect and fix salaries of officers, teachers, and employees of the three institutions mentioned; to make rules and regulations for the management of the institutions, to manage and control their property; to direct the expenditure of funds; and to do other acts necessary for the execution of the powers and duties conferred on them by law.

The board shall appoint a finance committee of three from outside its membership who shall devote all their time to the work of the institutions and shall each receive a salary of \$3,500 per year and

necessary traveling expenses incurred in visiting the several institutions. The members of the finance committee shall, once each month, attend each of the institutions for the purpose of familiarizing themselves with the work being done and transacting any business that may properly be brought before them as a committee. The office of the board and of the finance committee is at Des Moines, Iowa.

KANSAS EDUCATIONAL COMMISSION.

According to Bulletin No. 1 of the Kansas educational commission, published in December, 1908, the following recommendations were made to the session of the legislature to meet in January, 1909:

1. That the legislature adopt a resolution providing for the appointment of an educational commission to codify the school laws and to recommend such further legislation as may seem best for the interests of the public-school system.

2. That a longer term for rural schools be established. It is suggested that seven months be fixed as the minimum length of school term, and that state aid be given the weaker districts.

3. That the existing law providing for the consolidation of weaker and smaller districts be simplified and made more efficient.

4. That when two or more districts consolidate under prescribed conditions the consolidated district be given state aid to the amount of \$75.

5. That two state inspectors of schools be provided for; one for the common schools and one for the village and city schools.

6. That a more uniform and efficient method of certification of teachers be adopted and that qualifications be fixed. Two classes of certificates are named—"country certificates," to be of three grades, and "secondary (high school) certificates," to be of two grades.

7. That the unit of school organization be made larger. It is suggested that the township displace the district as the unit of control.

8. That provision be made for the employment of teachers for longer periods than one year.

9. That the date of holding annual school meetings be changed, and that such meetings be held in the month of March.

10. That local taxes derived from railroads be more equitably distributed, so that districts not lying on or contiguous to railroads may receive their share.

11. That the constitutional provision relative to escheats be made more effectual, by legislative enactment, so that the permanent school fund may secure all property belonging to it under such constitutional provision.

12. That objectionable features of the Barnes law relative to county high schools be removed, so that counties that have refused to take advantage of it may do so.

13. That the compulsory education law be so amended as to apply to all children between the eighth and sixteenth birthdays. Certain exceptions are suggested.

14. That normal courses be established in other high schools besides the 21 county high schools now having such courses.

15. That the elements of agriculture be required to be taught in all county high schools.

16. That such legislation be enacted as shall insure thorough inspection of all school buildings with relation to their sanitary conditions.

17. That legislation for the proper safeguarding of school buildings against fire be enacted.

18. That in all cities of the first, second, and third class school boards shall be authorized and directed to prescribe definite fire drills.

19. That the time, place, and manner of holding "county diploma examinations" be made uniform throughout the State, and that the same qualifications be required of all graduates.

20. That a law be passed that will relieve certain county superintendents for a portion of the year of the purely mechanical work of the office, and that shall compel a larger amount of time to be devoted to the actual supervision of schools. To this end clerical help is suggested.

21. That a library of not less than 50 volumes be established in every school district, and that a state school library board be constituted to prepare lists of suitable books and otherwise aid in their selection.

22. That provision be made for the election of county superintendents in such a manner as to remove the office from politics.

23. That appropriation be made to defray the expenses of superintendents attending the county superintendents' annual meeting.

24. That a uniform law relating to the size and organization of school boards be enacted. It is suggested that boards of education in cities of the first and second class consist of six members.

25. That the uniform text-book law be so amended as to raise the price of certain books and reduce the price of others.

26. That various minor changes in the school laws be made.

MICHIGAN COMMISSION ON INDUSTRIAL AND AGRICULTURAL EDUCATION.

A Michigan law, approved June 2, 1909, authorized the governor to appoint a commission of not less than five nor more than seven members, serving without pay, whose duty it shall be—

to make a careful study of the conditions of elementary, industrial, and agricultural education in the State of Michigan, whether under public school or other auspices, including the study of conditions of labor as they affect children between the ages of 14 and 18, and it shall further be the duty of this commission to present a report showing these conditions, with recommendations for such a plan of elementary, industrial, and agricultural training in connection with the public schools of the State as shall, in their judgment, best meet the conditions shown to exist.

NEBRASKA EDUCATIONAL COMMISSION.

The Nebraska educational commission, which was charged with preparing a new course of study for common schools, completed this work in season for its publication in June, 1909. According to a statement in the Nebraska Teacher for that month, in the new—

course are incorporated the best features of the Illinois and South Dakota courses, with such modifications as seemed necessary, and with the introduction of material especially adaptable to Nebraska conditions. The course of study will contain supplementary matter with reference to pupils' reading-circle work, boys' and girls' associations, school libraries, and important sug-

gestions with reference to carrying out the free high-school law. The Nebraska standard courses of study for one, two, three, and four year high schools are also included.

NORTH DAKOTA SCHOOL LAW COMPILATION COMMISSION.

An act of the North Dakota legislature, approved March 11, 1909, provides for a commission of five persons, to be created not later than August 1, 1909—

of whom the attorney-general and the deputy state superintendent of public instruction shall be members, and the other three members shall be appointed by the governor from among the best known and the best posted school men of this State.

The commission is directed to "report to the next session of the legislature any contradiction, inconsistencies, and omissions found in the existing laws," and to—

draft and report to that session of the legislature such school laws as, in its judgment, would be of use and benefit to the State, for information, assistance, and action of said legislature.

BOARD OF HIGHER CURRICULA—OREGON.

At the special session of the legislature of Oregon in 1909 a law was enacted providing for the establishment of "the board of higher curricula," to consist of five members to be appointed by the governor with the consent of the senate. With the exception of the members first appointed the term of office shall be for a period of five years, one member to be appointed each year. No member of the board, alumni, or faculty of any of the higher educational institutions shall be appointed to the board. Meetings shall be held annually and special meetings shall be called on petition of any three members. It is the duty of the board to determine what courses of studies or departments, if any, shall not be duplicated in the University of Oregon and the State Agricultural College, and to determine and define the courses of study and departments to be offered and conducted by each of these institutions.

PENNSYLVANIA EDUCATIONAL COMMISSION.

The Pennsylvania educational commission, authorized by the legislature of Pennsylvania in 1907, presented to the legislature of 1909 in the form of a bill an entire and complete school code for the public-school system of Pennsylvania. The bill was amended in so many important particulars by the legislature before it was passed that it was unsatisfactory to many people of the State and was finally vetoed by the governor. The proposed code contained provisions for the appointment of a state board of education; the establishment of two colleges of education in connection with the University of Pennsyl-

vania and the University of Pittsburg; the appointment of assistant county superintendents of schools; medical inspection; vocational and other special schools.

EDUCATIONAL COMMISSION CONSTITUTED BY THE TEXAS CONFERENCE FOR EDUCATION.

The first meeting of the educational commission constituted by the Texas conference for education (see p. 62) was held in Austin, Saturday, May 1, 1909. The commission was organized for the work of study by division into three committees, as follows:

Committee on maintenance: R. B. Cousins, of Austin; R. B. Bin-
nion, of Paris; and W. D. Cleveland, of Houston.

Committee on organization and correlation: W. S. Sutton, of Aus-
tin; C. P. Fountain, of College Station; and Theodore Harris, of San
Antonio.

Committee on teachers and instruction: P. W. Horn, of Houston;
W. H. Bruce, of Denton; and Mrs. Maggie Barry, of Sherman.

The first committee will consider the whole subject of taxation and support of the common schools. The second committee will study the whole subject of school administration, from the rural schools to the university, and the harmonizing of the entire system by means of such boards and agencies as may be devised. The third committee will study the whole course of qualifications of teachers and course of study and of the internal affairs of the schoolroom.

The commission enters upon the task with no fixed notion, and is seeking information and advice from the whole body of Texas teachers and others who may be interested in educational betterment, to the end that Texas may have the very best educational system that may possibly be constructed. (Texas School Magazine, May, 1909.)

UTAH SCHOOLHOUSE COMMISSION.

An act of the legislature of Utah approved March 9, 1909, provides for a schoolhouse commission to consist of the state superintendent of public instruction, the secretary of the state board of health, and an architect to be appointed by the governor, to whom must be submitted for approval the plans and specifications of any schoolhouse, or addition thereto, costing more than \$1,000, to be erected in any school district in the State outside of cities of the first and second class. The act requires a minimum amount of 15 square feet of floor space and 200 cubic feet of air space for each pupil, provision for proper ventilation and egress in case of fire, and forbids the erection of any schoolhouse with the furnace or heating apparatus in the basement or immediately under such building.

VERMONT STATE BOARD OF EDUCATION.

By an act approved December 14, 1908, the legislature of Vermont created a state board of education consisting of the governor as chairman, the state superintendent of education, and three members appointed by the governor. After the first appointments the appointed members are to serve for three years, one member to be appointed annually. The governor will also appoint biennially for the term of two years one resident commissioner in each town where a normal school is located who shall act with the state board of education in matters pertaining to the normal school in the town of his residence. The board is to assume all the powers and duties of the board of normal school commissioners, and will have full control and management of the normal schools and any normal-industrial or industrial school that may be established by the State.

VERMONT EDUCATIONAL COMMISSION.

By an act approved January 28, 1909, the legislature of Vermont provided for the appointment by the governor of a commission consisting of five members—

to investigate and consider ways and means of improving the public schools by increasing facilities for training teachers, by making the work in such schools more practical through instruction in agriculture and manual arts, and by adjusting the present system of public education to ends more promotive of the public interests of the State.

The commission is to render a report to the general assembly of 1910.

WEST VIRGINIA EDUCATIONAL BOARDS.

The legislature of West Virginia during its session in 1909 provided for the creation of a board of control of three members to have general control of all state institutions and for a board of regents of five members, including the state superintendent of free schools, to have charge of educational matters pertaining to the state educational institutions.

II. EDUCATIONAL ASSOCIATIONS, CONFERENCES, ETC.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE: SECTION L—EDUCATION.

[From a report made to Science by C. R. Mann, secretary of section L.]

The Baltimore meeting of Section L showed that this new section is growing in strength and usefulness. The section's policy of devoting each session to a single topic with set papers by invited speakers was tried and proved a great success. The section plans to devote

itself to a scientific study of educational problems, and has appointed a committee to study the distribution of students in elective courses in college and report at the next meeting. This committee consists of Prof. E. L. Thorndike, chairman, and Messrs J. G. Bowman, George E. Fellows, Abraham Flexner, C. H. Judd, Frederick Keppel, and C. R. Mann.

Officers for the coming year were elected as follows:

Vice-president.—Dean James E. Russell, Columbia University, New York.

Member of the council.—President Charles S. Howe, Case School of Applied Science, Cleveland.

Member of the general committee.—Prof. Charles H. Judd, Yale University, New Haven.

Member of the sectional committee.—Hon. Elmer E. Brown, United States Commissioner of Education, Washington.

Vice-President John Dewey presided at all the meetings. The address of the retiring vice-president, Hon. Elmer E. Brown, dealt with the subject "World standard of education."

The first session of the section was devoted to a discussion of the United States Bureau of Education by Mr. W. Dawson Johnston, librarian of the bureau; Prof. C. E. Elliott, of the State University of Wisconsin, and Mr. E. C. Moore, superintendent of schools, Los Angeles, Cal.

At the second session of the section the topic "American college education and life" was treated by Profs. Josiah Royce, of Harvard; William North Rice, of Wesleyan; James H. Tufts, of Chicago, and Mr. Abraham Flexner, of the Carnegie Foundation for the Advancement of Teaching. These papers have been printed in full in *Science* for March 12 and 19.

Two joint sessions were held: One with the American Psychological Association and the other with the American Federation of Teachers of the Mathematical and the Natural Sciences. At the first of these joint sessions the following programme was given:

"Psychological investigations that will help the educator," by Prof. E. A. Kirkpatrick.

"Studies in number consciousness," by Prof. C. H. Judd.

"The factors of general ability," by Prof. E. L. Thorndike.

"Homogeneous content in the measurement of memory," by Prof. C. E. Seashore.

"The general effects of special practice in memory," by Prof. W. F. Dearborn.

"The study and treatment of retardation," by Prof. Lightner Witmer.

The report of this meeting has been published in the *Proceedings of the American Psychological Association*.

The other joint session with the science teachers was given up to a symposium on "The problems of science teaching," by President Ira Remsen, Johns Hopkins University, and Messrs. William T. Campbell, Boston Latin School; George F. Stradling, Northeast Manual Training High School, Philadelphia; John M. Coulter, The University of Chicago, and Lyman C. Newell, Boston University. The report of this meeting has been published in *Science* for April 30, in connection with the report of the American Federation, and also in *School Science and Mathematics* for March and April, 1909.

AMERICAN FEDERATION OF ARTS.

The American Federation of Arts was organized at a convention held in Washington, D. C., May 11-13, 1909, of persons interested in the improvement of art conditions. The objects of the federation, as stated in the constitution, are "to unite in fellowship all institutions and organizations interested in architecture, sculpture, painting, landscape, craftsmanship, collections of art, and village and city development; to harmonize and nationalize the art interests of the country; to stimulate the love of beauty and to cultivate public taste." The active membership is limited to institutions and organizations, each of which shall constitute a chapter.

Among the officers elected at the organization meeting are Mr. Charles L. Hutchinson, Chicago, Ill., president; Miss Leila Mechlin, Washington, D. C., assistant secretary. The headquarters of the federation are located at 1741 New York avenue, Washington, D. C.

The more specific purposes of the association, as outlined by Senator Root in an address delivered at the meeting, include the following:

1. To encourage the organization of art societies; the establishment of art schools and art galleries; to encourage the exhibition of private art collections for the benefit of the public; to encourage American artists and to aid in securing higher recognition for merit.

2. To encourage the study of art in the public schools, particularly in the towns and villages; to encourage boards of education, school superintendents, and the faculties of seminaries, academies, colleges, and universities to pay more attention to the cultivation of the taste of their students and to teach them correct ideas in art and the advantage of making things beautiful.

3. To encourage the appointment of competent commissions in municipalities and States to supervise public architecture, monuments, parks, plans, and other improvements in order that they may be in accordance with the best rules of art.

4. To improve the standard of private architecture; to encourage the planting of trees, shrubbery, hedges in the farms and dooryards, and whatever may be done to embellish the public streets of cities, towns, and villages.

5. To support the plan of the park commission for beautifying the city of Washington, and to aid in persuading Congress to follow its suggestions in the location of future public buildings, monuments, and other improvements at the national capital.

6. To assist in preserving natural scenery from destruction and desecration; to extend the national-park system, the forest reserves, and preservation of historic and natural landmarks.

7. To promote the movement for public playgrounds, school gardens, and other efforts to cultivate the love of nature and of art in the minds of children.

8. To support the movement for the enlargement of the jurisdiction of the Supervising Architect of the Treasury and the organization of a bureau of arts which shall have supervision of all public buildings, monuments, and other improvements ordered by Congress throughout the United States, and the appointment, pursuant to legislation, of an advisory council of experts to advance the standard of public architecture.

9. To support and advance the National Gallery of Art, which has already been established under the Smithsonian Institution by gifts and bequests of important collections from the late Harriet Lane Johnston, of Washington; Mr. William T. Evans, of New York, and Mr. Charles L. Freer, of Detroit.

10. To assist in securing the erection of an appropriate building for the National Gallery at Washington corresponding to the Congressional Library and the National Museum.

11. To afford an organization through which the general opinion of all Americans who are lovers of beauty in art and in nature may find expression and be made effective as from time to time public questions shall arise which ought to be determined by the highest standards of taste.

In the course of an address at the organization meeting, Elmer Ellsworth Brown, United States Commissioner of Education, made the following remarks upon the function of art in the schools:

The most obvious thing to the great majority of our people is the fact that scientific education has to do with the increase of human convenience and human comfort. For that very reason this thing that is so absolutely essential and is, in some respects, the highest and the finest thing in our modern education, may frankly be admitted to be a thing that is attended with danger. It is attended with a danger of the subtlest materialism. There can be no doubt that this science must be supplemented by something else, if it is to escape that subtle danger of materialism, a danger that is perhaps more serious in the case of those whom it affects least grossly—in the case of those whom it affects upon the most spiritual side.

Our science, as we teach it in the schools, lays stress such as no earlier education could lay upon the ability of the present age and the ability of the single individual to put things to the test. Our knowledge is to be verified now and here, not by a slow process, but by an immediate process. It is to be verified on the spot. We come, accordingly, to have only incidental care for the slow making of human thought and human character, through the ages, because we have so much greater interest in the discovery of natural laws which can be worked out right here in this laboratory by this single man. We need, for the sake of our common humanity, to have a new emphasis upon those things that can not be done on the spot.

We need a new insistence upon those things which can be tested and verified and determined only in the long course of human experience, of racial experience, otherwise we tend to isolate ourselves and become simply crumbling units, having only a loose connection one with another in an intense individualism. We need to acquire a new respect for those values that only time can reveal, and that is what art has to give to us. It is to give to us a new appreciation of things that are old, of things that are capable of standing the test of time. It is to correct that modern danger of valuing things in proportion as they are new.

Washington has been designated as the headquarters of the federation. It is proposed to publish a monthly bulletin containing museum and school departments, etc.

**AMERICAN FEDERATION OF TEACHERS OF THE MATHEMATICAL
AND THE NATURAL SCIENCES.**

A meeting of delegates of associations interested in the formation of the American Federation of Teachers of the Mathematical and the Natural Sciences was held in Chicago, January 1, 1908. There were present representatives of the following associations: Association of Physics Teachers of Washington City; Association of Mathematics Teachers of New England; Central Association of Science and Mathematics Teachers; Colorado Mathematical Society; Connecticut Association of Science Teachers; Indiana State Science Teachers' Association; Kansas State Association, mathematics section; Michigan Schoolmasters' Club, mathematics, physics, and biology sections; Nebraska State Association, physical science section; New England Association of Chemistry Teachers; New York State Science Teachers' Association; North Dakota Association of Science Teachers; Northeastern Ohio Association of Science and Mathematics Teachers. Articles of federation were adopted which provide that only associations whose purpose is the study of the problems of science and mathematics teaching and whose active members number 25 or more are eligible to membership; that an association joins the federation by appointing delegates to a body known as the "Council of the American Federation;" that the duties of the council shall consist in devising methods by which the associations may work together for the betterment of the teaching of science and of mathematics.

The council of the federation met in Baltimore, Md., December 28, 1908. The report of the executive committee outlined the work of the year, including the appointment of a special committee on the bibliography of science teaching. Three committees were authorized, as follows: One on a syllabus of propositions in geometry; one on publication and publicity, to report in 1909 on the present needs and facilities for publishing material of interest to the federation, and to make recommendations as to ways and means of improving these facilities; and one to investigate the present conditions of college entrance, to define the attitude of the federation toward college-entrance problems, and to recommend action that may tend to unify and simplify college-entrance requirements.

The officers for 1909 are as follows: Dr. H. W. Tyler, president; Dr. C. R. Mann, University of Chicago, secretary-treasurer.

AMERICAN SCHOOL PEACE LEAGUE.

The American School Peace League, which held its first annual meeting in Denver last month in connection with the convention of the National Education Association, offers three prizes, of \$75, \$50, and \$25, for the best three essays on—

1. "The United States, the exemplar of an organized world."
2. "The history of international arbitration."
3. "The history and significance of the two Hague peace conferences."
4. "The opportunity and duty of the schools in the international peace movement."
5. "The evolution of patriotism."

These prizes are open to seniors in the normal schools of the United States and the seniors of the preparatory schools of the United States. (The Independent, Sept. 9, 1909.)

ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE MIDDLE STATES AND MARYLAND.

The twenty-second annual convention of the Association of Colleges and Preparatory Schools of the Middle States and Maryland was held at Franklin and Marshall College, Lancaster, Pa., on November 27 and 28, 1908. One hundred and eighty-one delegates were registered, representing 94 institutions of learning.

The committee on the establishment of a college entrance certificate board reported that a number of meetings had been held during the year, and that a constitution and rules had been adopted by the committee. The committee reported also that the revised constitution had been referred back to the colleges, and that as soon as it had received the approval of not less than 15 colleges the board would be organized. The report was unanimously adopted by the association. The principal officers for 1908-9 are: James D. Moffat, Washington and Jefferson College, Washington, Pa., president, and Prof. Arthur H. Quinn, University of Pennsylvania, Philadelphia, Pa., secretary.

The next convention will be held in Washington, November 26 and 27, 1909.

ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE SOUTHERN STATES.

The fourteenth annual meeting of the Association of Colleges and Preparatory Schools of the Southern States was held at Chattanooga, Tenn., November 5-6, 1908. The object of this association, as stated

in its constitution, "shall be to consider the qualifications of candidates for admission to colleges, the methods of admission, the character of the preparatory schools, the courses of studies to be pursued in the colleges and schools, including their order, number, etc., as well as such other subjects as tend to the promotion of interests common to colleges and preparatory schools."

The fourteenth meeting was occupied almost exclusively with the consideration of the adoption of new by-laws, in which a higher standard is exacted of candidates for admission to college. The by-laws finally adopted, to become operative in September, 1910, are as follows:

1. No college belonging to this association shall maintain a preparatory school as part of its college organization. In case such school is maintained under the college charter, it must be kept rigidly distinct in students, faculty, and discipline.

2. Every college belonging to the association shall seek to promote the development of high schools in every way, and to this end shall admit no students except those who have completed a reputable high school course. In measuring the amount of work done by such students, the association accepts the valuation indicated in the first annual report of the Carnegie Foundation for the Advancement of Teaching, published in 1906.

3. Candidates seeking full admission to college for any degree course in the literary department must offer 14 units of work. Irregular students may be admitted to partial standing by offering 10 units of work. Students may be admitted either on certificate or on written examination, but they must in all cases comply with the above requirements as to the amount of work offered. Conditions may not be so construed as to excuse students from offering at least 10 units of preparatory work. The association strongly recommends that all candidates be required to offer English and mathematics, and that all candidates for full admission or for any degree courses be required to offer the necessary preparation in two languages besides English. Irregular students may become regular, that is, may secure full admission to college by passing off the necessary number of units in subjects prescribed for admission as the result of private study or in class; but college work thus offered for admission must not be counted toward a degree.

4. Special students may be admitted to college without the usual form of examination under the following conditions: (a) They must be of mature age (not less than 20 years is suggested); (b) they must not be admitted to classes for which entrance examinations are required unless they pass such examinations; (c) they must give proof of adequate preparation for the course sought; (d) their names must be separately printed in the catalogue.

5. No preparatory school that confers degrees shall be eligible to membership in the association. Any school seeking membership must have a curriculum of study amply sufficient to meet the fullest requirements of the association for admission to college and must have students regularly finishing such course of study each year.

President F. P. Venable of the University of North Carolina was elected president of the association for 1908-9, and Dr. Frederick W. Moore, of Vanderbilt University, secretary.

ASSOCIATION OF COLLEGIATE ALUMNÆ.

The constitution of the Association of Collegiate Alumnae provides that—

Any woman who has received a degree in arts, philosophy, science, or literature from any college, university, or scientific school admitted to the association is entitled to regular membership. Any woman who has received an advanced nonprofessional degree from an approved American or foreign university is entitled to graduate membership, with the full powers and duties of regular members. New institutions shall be admitted or approved on a three-fourths vote of the executive committee, confirmed by vote of three-fourths of the voting body of the association present at any regular meeting. Notice of such proposed action by the association shall be given with the call for the meeting.

An institution to be entitled to admission must show the following qualifications:

I. ADMINISTRATION.

(a) The board of trustees shall be so constituted as to support sound financial and educational methods.

(b) There shall be a reasonable recognition of women in faculties and in the student body and proper provision for the intellectual and social needs of women students.

(c) Much weight shall be given to the fact where women are on the board of trustees.

(d) In the consideration of a coeducational institution great weight shall be given to the fact that such an institution has a dean or adviser of women, above the rank of instructor, giving instruction and counted a regular member of the faculty.

II. DEGREES.

(a) The bachelor's degree shall be based on scholarly attainments represented by the following general conditions:

(1) Entrance requirements such as demand at least four years of serious secondary school work for preparation.

(2) Class sections restricted to such numbers as insure proper individual instruction, except in the case of purely lecture courses.

(3) A residence of at least two years in the college conferring the degree or in a college of equally high grade.

(4) Graduation requirements which correspond to the amount of work ordinarily included in four years of serious college study.

(b) The master's degree shall be given only for resident graduate work; or, in the case of the honorary degree, for original work of high distinction.

(c) The degree of doctor of philosophy shall not be given *causa honoris*.

III. FACULTY.

(a) The number of full professors shall be at least as large as the minimum number, and their ratio to the number of students shall be at least as large as the average number in institutions of the same type already admitted to membership.

(b) The ratio of the number of instructors to the number of students shall be at least as large as the average in institutions of the same type already admitted to membership.

(c) The salaries of the teaching staff shall not be lower than the minimum for the same grade in institutions already admitted to membership where the living conditions are similar.

(d) All members of the teaching staff, unless adequate reasons can be given for a few possible exceptions, shall hold degrees from colleges of recognized standing.

(e) A distinctly large proportion of the full professors shall hold degrees based on graduate university work.

(f) There shall be no preparatory department under the government or instruction of the college faculty.

IV. MATERIAL RESOURCES.

(a) The number of laboratories shall not be less than the average number in institutions of the same type already admitted to membership.

(b) The number of books in the library shall not be less than the average number in institutions of the same type already admitted to membership.

(c) The number of departmental journals regularly placed in the libraries shall not be less than the average number in institutions of the same type already admitted to membership.

(d) The total property shall not be less than the minimum.

(e) The productive endowment shall not be less than the minimum.

(f) The income per student shall not be less than the average.

(g) No coeducational institution shall be considered in which there is not special provision, through halls of residence or in other buildings, for the social life of the women students.

V. ALUMNÆ.

There shall be 50 *alumnæ* who have applied for membership in the association.

The following institutions hold corporate membership in the association in 1909: Barnard College, Boston University, Bryn Mawr College, University of California, The University of Chicago, Cornell University, University of Illinois, University of Kansas, Leland Stanford Junior University, Massachusetts Institute of Technology, University of Michigan, University of Minnesota, University of Missouri, The University of Nebraska, Northwestern University, Oberlin College, Radcliffe College, Smith College, Syracuse University, Vassar College, Wellesley College, Wesleyan University, Western Reserve University, University of Wisconsin.

The next meeting of the association will be held in Cincinnati, October 27-30, 1909.

ASSOCIATION OF SOUTHERN STATE SUPERINTENDENTS OF PUBLIC INSTRUCTION.

Through the kindness and courtesy of Dr. Robert C. Ogden and the Southern Education Board the members of the Association of Southern State Superintendents of Public Instruction were afforded

the opportunity of visiting and inspecting the schools of New York City and Boston and of examining the work of the state department of education at Albany, N. Y., in October, 1908.

The following superintendents met at the Seymour Hotel, in New York City, on the morning of October 12, 1908; J. N. Powers, Mississippi; R. B. Cousins, Texas; H. C. Gunnels, Alabama; R. L. Jones, Tennessee; T. C. Miller, West Virginia; J. G. Crabbe, Kentucky; T. C. Harris, Louisiana; G. B. Cook, Arkansas; J. M. Pound, Georgia; O. B. Martin, South Carolina; W. M. Holloway, Florida; J. Y. Joyner, North Carolina.

By special invitation, Hon. J. B. Aswell, retiring state superintendent of Louisiana; Dr. Wickliffe Rose, general agent of the Peabody fund; Dr. P. P. Claxton, chairman of the campaign committee of the Southern Education Board, were present and accompanied the Southern State Superintendents on their itinerary. Dr. Robert C. Ogden also accompanied the party throughout the itinerary.

October 12 and 13 were spent in visiting Teachers College of Columbia University, the City College of New York, and the public schools of Greater New York, including the normal schools of the city. October 15 and 16 were devoted to a visit to Harvard University and the Boston public schools. October 17 was spent in examining the work of the New York State department of education at Albany.

The party was cordially welcomed everywhere and given every opportunity to observe and study the work in the schools visited. The superintendents made a special study of teacher training and industrial work.

At the close of the itinerary it was the unanimous verdict of the Southern State Superintendents that they had derived inspiration and information for the educational work of their respective States from this study at first hand and this observation in the concrete of the best work of some of the best schools of New York and Massachusetts.

CALIFORNIA TEACHERS' ASSOCIATION.

The California Teachers' Association, at its meeting at San Jose, December, 1908, provided for a permanent secretary at a salary of \$2,400, who will devote his whole attention to the duties of the office and will act as editor of an organ to be published monthly.

CATHOLIC EDUCATIONAL CONVENTION.

At the annual convention of the Catholic Educational Association, held in Cincinnati in July, 1908, Right Rev. D. J. O'Connell, of the Catholic University, being president-general, more than two score

States were represented by the 500 delegates to the different departments of the association, including a large attendance of nuns representing the teaching orders in all parts of the United States.

Archbishop Moeller, who officiated, in his opening address spoke of the growing conviction among thoughtful educators outside the church of the necessity of combining religious with secular knowledge in the schools.

A report on "The present condition of education in the United States," by Very Rev. E. A. Pace, of the Catholic University, emphasized the necessity of greater unification, systematization, and correlation in Catholic schools. He noted the fact that a closer union between the parochial school, the college, and the university is gradually being effected, whereby it will become possible to give a child a thorough Catholic education from his first school days to his graduation from the university.

Rev. Dr. T. E. Shields, also of the Catholic University, advocated a system of teaching religion in the schools similar to that employed with secular branches, that is, by comparison and object lessons, which would be more effective than the usual method whereby a child is compelled to commit to memory a cut-and-dried course without grasping its meaning. Other speakers objected to this method as too revolutionary, insufficient, vague, and unpractical.

A paper by Dr. John E. Griewe, of Cincinnati, advocated the instruction of parochial-school teachers in the nature of infectious and contagious diseases and a system of medical inspection of the schools. Apparatus for physical training is entirely unnecessary, he asserted, walking, running, and jumping in the open air being the best exercises.

A proposition to require uniform text-books for the schools of a diocese received approval at a teachers' meeting. In the school department the subject of children's reading was discussed, and a motion carried to appoint a library committee to work in cooperation with the Catholic Truth Society in preparing a list of children's books. At the superintendents' conference the examination of teachers and teachers' meetings furnished topics for discussion.

Practically all the officers of the preceding year were reelected, and Boston was selected for the 1909 meeting.

CONFERENCE FOR EDUCATION IN TEXAS.

The Conference for Education in Texas was organized February 22, 1907, to supply a popular need for a nonpartisan association composed of business and professional men to promote the interests of education in the State. More than 500 citizens responded to the call for the organization meeting. Since its formation the conference has been unceasing in its efforts to create a public opinion favorable to

good schools and improved school equipment. Up to April, 1909, it had issued ten bulletins, of which it had distributed more than 250,000 copies, and it has sent speakers to all sections of Texas. The conference has been mainly instrumental in securing the passage of important laws that increased the appropriation per capita for the support of the public free schools, lengthened the school term from five months to more than six months, established professional county supervision in more than sixty counties, and otherwise contributed to the improvement of the whole system in the State.

It was through the efforts of the state-wide campaign conducted by the conference that the adoption of a constitutional amendment was brought about in 1908, which substitutes majority rule for the two-thirds rule in the school-tax elections and authorizes districts to levy certain local taxes. Of nine amendments submitted to the people of the State at the November election this was the only one adopted.

At the meeting of the conference held at Austin in March, 1909, a resolution was adopted directing the president to appoint, with the advice of the executive board, a commission to formulate a plan for the reorganization of the educational system of Texas, and report the same at the next annual meeting. An account of the action taken at the first meeting of this commission is given on page 51.

Officers: Clarence Ousley, Fort Worth, president and chairman of the executive board; J. L. Kesler, Waco, vice-president; A. N. McCallum, Austin, recording secretary; W. S. Sutton, Austin, corresponding secretary; C. E. Evans, Austin, general agent.

CONFERENCE FOR EDUCATION IN THE SOUTH.

The Twelfth Annual Conference for Education in the South was held in Atlanta, Ga., April 14-16, 1909. Its recommendations are embodied in the following resolutions adopted by the conference:

First. Improvement in county supervision as the strategic point in the entire educational system.

Second. The professional training of teachers to meet the just demand for more efficient service, and especially the strengthening of the Department of Education in the higher institutions for the training of men as teachers and principals of high schools and as superintendents.

Third. The extension of local school improvement leagues to every community in the South and the earnest effort to place this inspiring work upon a self-supporting basis.

Fourth. Continued efforts in behalf of compulsory education in such a manner as may be deemed wise in each State.

Fifth. We recognize with delight the increase in dignity and power of the office of state superintendent of education, which is attracting the strongest men among us, and the growing recognition of these leaders as the real shepherds of the people.

Sixth. The National Bureau of Education at Washington has made such use of its limited resources as has rendered it a valued reenforcement of every good

educational movement throughout the land. We are glad to note that Congress has begun to make a distinct increase in the appropriations for this office. Such increase as has hitherto been made is, however, wholly inadequate to the needs of the office and painfully disproportionate to the importance of the interests which it serves. We respectfully urge upon Congress that it undertake without further delay the placing of this bureau upon such a plane of efficiency as will enable it to render in full the service which the States represented in this conference require and expect from such a Federal office.

CONFERENCE FOR THE ORGANIZATION OF A CHILD-WELFARE BUREAU.

A conference was held at Worcester, Mass., July 6 to 10, 1909, the ultimate object of which was an organization of all the societies and movements having to do with child life. To President G. Stanley Hall, of Clark University, is due the initiative in the new movement. A number of prominent educators attended the meeting, including not only those directly associated with colleges and universities, but also many leaders in the playground, kindergarten, medical care, child labor, and kindred organizations. A committee was appointed to prepare a plan of organization of a child-study bureau.

The new organization will be known as the "Child Conference for Research and Welfare." Mr. Henry S. Curtis has been elected general secretary. The following societies, movements, and agencies are embraced in the organization: Mothers' congress, day nursery, the kindergarten, child institutional homes, scientific child study, special education of defective and subnormal children, juvenile psychological clinic, tuberculosis agencies for children, eugenic movements, health associations, courts of child labor, playground movement, children's libraries, drama, music and dancing for children, recreative nature study, American Home Economic Association, the General Federation of Women's Clubs, the Association of Collegiate Alumnae, and others.

The child study bureau, which will be established this fall at Clark University, will be entirely independent of the new organization, but will be represented in it to the extent that all the other societies are.

CONFERENCE OF CAMPAIGN MANAGERS FOR THE SOUTHERN STATES.

There was a special conference of the campaign managers for the Southern States, held at Atlanta, April 15, 1909, in connection with the Twelfth Conference for Education in the South, P. P. Claxton presiding. The following campaign managers for the several States were present: J. Y. Joyner, North Carolina; Henry E. Fries, North Carolina; O. B. Martin, South Carolina; W. H. Hand, South Carolina; Jere M. Pound, Georgia; Mrs. Walter B. Hill, Georgia; H. C. Gunnels, Alabama; B. J. Baldwin, Alabama; R. L. Jones, Tennessee; S. G. Gilbreath, Tennessee; P. P. Claxton, Tennessee; James B. As-

well, Louisiana; T. H. Harris, Louisiana; J. N. Powers, Mississippi; P. H. Saunders, Mississippi; George B. Cook, Arkansas; D. B. Johnson, South Carolina; T. C. Miller, West Virginia. The conference was called to consider plans for the educational campaigns for the ensuing year.

CONFERENCE OF CHIEF STATE SCHOOL OFFICERS.

[Report of the secretary.]

The Third Conference of Chief State School Officers was held at Denver, Colo., July 8, 1909, and was called to order by Elmer Ellsworth Brown, United States Commissioner of Education, who spoke briefly of the good resulting from the two conferences previously held in Washington, D. C., and in Chicago.

On motion, the conference selected State Superintendent Nathan C. Schaeffer, of Pennsylvania, as chairman, and State Superintendent John F. Riggs, of Iowa, as secretary.

State Superintendent J. Y. Joyner, of North Carolina, State Superintendent Edward Hyatt, of California, County Superintendent Kate Logan, of Cherokee County, Iowa, and President John W. Cook, of the State Normal School, De Kalb, Ill., spoke to the topic "Supervision and rural school improvement; district superintendent; county superintendent; township superintendent, etc."

State Superintendent Katherine M. Cook, of Colorado, State Superintendent S. Belle Chamberlain, of Idaho, and State Superintendent E. D. Cameron, of Oklahoma, spoke to the topic "Revenues and school improvement."

State Superintendent Howard A. Gass, of Missouri, and State Superintendent R. B. Cousins, of Texas, spoke to the topic "The country school and farm life."

The talks were all informal, and in the main recited the experiences of the several speakers in dealing, in their respective States, with the paramount problem of rural school improvement.

On motion of State Superintendent Robert J. Aley, of Indiana, the Commissioner of Education was requested to call a fourth conference of the chief school officers of the United States, to be held at Indianapolis in connection with the National Convention of the Department of Superintendence in March, 1910.

The following States were represented in this, the third conference, by the persons named:

California, State Superintendent Edward Hyatt.

Colorado, State Superintendent Katherine M. Cook.

Idaho, State Superintendent S. Belle Chamberlain.

Illinois, State Superintendent F. G. Blair.

Iowa, State Superintendent John F. Riggs.
 Indiana, State Superintendent Robert J. Aley.
 Kansas, State Superintendent E. T. Fairchild; Assistant State Superintendent C. C. Starr.
 Kentucky, Mr. W. H. Bartholomew.
 Louisiana, State Superintendent T. H. Harris.
 Michigan, Mrs. Etta H. Gardine, representing State Superintendent L. L. Wright.
 Maryland, Assistant State Superintendent B. K. Purdum.
 Minnesota, State Superintendent C. G. Schultz.
 Missouri, State Superintendent Howard A. Gass.
 Montana, State Superintendent W. E. Harmon.
 Nebraska, Deputy State Superintendent Frank S. Perdue.
 North Carolina, State Superintendent J. Y. Joyner.
 Oklahoma, State Superintendent E. D. Cameron.
 Pennsylvania, State Superintendent N. C. Schaeffer.
 South Dakota, State Superintendent H. A. Ustrud.
 Texas, State Superintendent R. B. Cousins.
 Utah, State Superintendent A. C. Nelson.
 Washington, Mr. E. T. Mathes, representing State Superintendent H. B. Dewey.
 West Virginia, State Superintendent M. P. Shawkey.
 Wisconsin, State Superintendent C. P. Carey.
 Wyoming, Deputy State Superintendent Ira B. Fee.

The National Bureau of Education was represented by the Commissioner of Education and Dr. Harlan Updegraff.

CONFERENCE OF OFFICERS OF STATE ASSOCIATIONS.

[Communicated to the Bureau by Mr. W. W. Remington, secretary to the conference.]

At the conference of officers of state associations held in Denver, Colo., July 9, 1909, the following-named persons were constituted a committee on permanent organization:

Supt. Ebenezer Mackey, Trenton, N. J., chairman of the committee.
 Supt. B. G. Shackelford, Cape Girardeau, Mo.
 Secretary L. E. Armstrong, San Francisco, Cal.
 Supt. N. R. Baker, Ensley, Ala.
 Secretary W. W. Remington, Denver, Colo., secretary to the committee.

Corresponding Secretary J. Fred Olander, Pierre, S. Dak.

Supt. Charles S. Foos, Reading, Pa., was made permanent chairman of the conference for the term of one year, and W. W. Remington was made permanent secretary for the same term. Superintendent Foos is expected to act with the committee on permanent organization.

The committee is instructed to present a petition to the directors of the National Education Association for the formation of a department to be known as the "Conference of Officers of State Associa-

tions." The statement of the purposes of the conference as contained in the petition is as follows:

It is expected that the conference of officers of state associations will collect and disseminate information regarding the organization and the activities of state teachers' associations; that it will serve as a means of securing cooperation among such associations in engaging speakers and preparing annual programmes; that it will consider educational topics upon which concert of action by teachers' organizations may be desirable, and make recommendations concerning such concert of action, and that it may, in all ways practicable, serve as a means of advancing the efficiency of teachers' organizations in constructive work of every sort for the advancement of education and of the teacher.

The petition is to be circulated by mail for signatures and presented to the directors at their next meeting. In case the petition shall be refused, the committee is to prepare a programme as a "Society meeting with the National Education Association" for publication in the official programme for the meeting of 1910.

Chapter III of this report contains a paper on state educational associations by Mr. Charles S. Foos, superintendent of the public schools of Reading, Pa.

CONFERENCE OF PROFESSORS OF SECONDARY EDUCATION IN THE SOUTH.

On April 12-14, 1909, there were held in connection with the conference for education in the South a number of conferences of professors of secondary education in the South. The general conclusions of the conference are expressed in the following resolutions, adopted at the final meeting on Wednesday:

1. It is most necessary to impress upon the public the fact that the elementary school, the high school, the college, and the university, whether supported by taxation or in other ways, are parts of one system of public instruction, not unrelated and independent schools. A State can secure educational efficiency only when these different parts of its educational system articulate and co-operate.

2. To secure such cooperation and coordination some effective form of organization and supervision must be adopted by each State.

3. This form of organization would include expert superintendence over public instruction, both in State and county.

4. Such officers should be chosen from the best educational experts, and their places should be made equal in dignity, responsibility, remuneration, and freedom from political interference to those of the best paid officers in colleges and universities.

5. Such supervisors of education should work in effective cooperation with the institutions of higher learning. All colleges and universities, whether upon public or private foundation, are public institutions, and owe it to themselves and to the cause of education to take an intelligent and sympathetic interest in the upbuilding of secondary and elementary schools; not simply as feeders to themselves, but as factors in the economic and social advancement of the State.

6. In virtue of their duties as public institutions, all colleges, whether connected with the State or with a denomination ought to give free access to their records and full information to the public concerning all details of their academic and financial administration. The honest college has everything to gain and nothing to lose by taking the public into its confidence.

7. While the elevation of standards in the colleges and professional schools is greatly needed, the honest enforcement of the standards already adopted will go far toward the proper differentiation between the functions of the college and the high schools, and would tend toward their articulation rather than the overlapping, now so common.

8. More generous provision for the training of teachers is a pressing need in the educational systems of many States. It will require the most effective work on the part of normal schools and the departments of education of the universities to meet the extraordinary demand for teachers during the next two decades. Such work should, however, only be undertaken by institutions with adequate resources in income, equipment, and in teachers.

CONFERENCE OF STATE SUPERVISORS OF WOMAN'S SCHOOL IMPROVEMENT WORK IN THE SOUTHERN STATES.

The state supervisors of the woman's school improvement work in the Southern States met in special conference at Atlanta April 14, 1909, P. P. Claxton presiding. The following supervisors participated in the conference: Mrs. B. B. Munford, Virginia; Mrs. Charles D. McIver, North Carolina; Miss Mary T. Nance, South Carolina; Mrs. Walter B. Hill, Georgia; Miss Susie V. Powell, Mississippi; Miss Agnes Morris, Louisiana; Mrs. Clio Harper, Arkansas; Miss Virginia P. Moore, Tennessee; Mrs. Thames, Alabama. The reports of the supervisors made an inspiring story of the work of the state associations with organization in the State, the county, the local center. The interest of the conference centered in the improvement of the country school, in making the school the center of community life where teachers, pupils, and parents become educated by doing things together.

CONFERENCE ON UNIFORM ENTRANCE REQUIREMENTS IN ENGLISH.

The conference on uniform entrance requirements in English met on February 22, 1909, at Teachers College, Columbia University, for the purpose of preparing a revised statement of the uniform requirement which it recommends to the various bodies which it represents. A special committee of the conference has been studying carefully for some months the various questions involved, and had been in communication with many associations, teachers, head masters, and professors.

The changes of importance in the revision made by the conference are the following:

1. The study of English grammar and rhetoric is further emphasized, as is also the need of securing good English in all the student's exercises and recitations.

2. A group of translations of the ancient classics—the Bible, the Iliad, the Odyssey, and the Æneid—is added to the books prescribed for reading.

3. The division of the examination into preliminary and final is retained and emphasized. The main elements of the preliminary examination reappear in the final examination.

4. Most important of all, the student's skill in composition and his knowledge and appreciation of literature are, to a large extent, to be tested separately. The topics for composition, whether in the preliminary or the final examination, are no longer to be chosen entirely from the prescribed books. This last change is welcome and thrice-prayed for, but it must not be forgotten that the conference's first requirement of fifteen years ago, whereby the study of composition and that of literature were closely bound together, has had a far-reaching influence in encouraging the reading of the English classics in the secondary schools, and that it is only because this practice is thoroughly well established that a modification of the requirement is now wise.

The conference has now established itself definitely as a permanent advisory body, and has adopted a constitution by which each of the following bodies is entitled to send delegates: The New England Association of Colleges and Preparatory Schools, the similar associations of the Middle States and Maryland, of the North Central States, and of the Southern States, the conference of the New England Colleges on entrance requirements in English, and the College Entrance Examination Board. Additions to membership are also provided for. The present officers are, Prof. F. H. Stoddard, New York University, chairman; Prof. C. T. Winchester, Wesleyan University, vice-chairman; Principal Wilson Farrand, Newark Academy, secretary-treasurer. These officers, together with Prof. F. N. Scott, University of Michigan, and Prof. W. L. Cross, Yale University, constitute the executive committee. (*Educational Review*, April, 1909.)

DENTAL FACULTIES ASSOCIATION OF AMERICAN UNIVERSITIES.

The Dental Faculties Association of American Universities was organized at the Bellevue-Stratford Hotel, Philadelphia, Pa., on June 5, 1909, by representatives of Harvard University, University of California, University of Iowa, University of Michigan, University of Minnesota, and University of Pennsylvania.

The objects of the association are to promote dental education, to improve the standard of the preliminary education required for admission to dental schools, to establish reciprocal educational relations with its members and ultimately to establish a national standard, which may serve as the basis for a reciprocal interchange of dental licenses among the several States. The membership of

this association is limited to dental schools which are integral parts of state universities or of chartered universities of equal standing of the United States, holding membership in the Association of American Universities, demanding graduation from accredited high schools, that require four years of high school work or the equivalent amount of education for matriculation.

The officers of the association for the year 1909-10 are Dr. J. G. Sharp, University of California, Berkeley, Cal., president; Dr. Eugene H. Smith, Harvard University, Cambridge, Mass., vice-president; Dr. Edward C. Kirk, University of Pennsylvania, Philadelphia, Pa.

EASTERN PUBLIC EDUCATION ASSOCIATION.

This association is composed of volunteer organizations which have made successful attempts at securing humanitarian laws, such as laws providing for compulsory school attendance, free popular lectures, increase of teachers' salaries, regulation of child labor, and improvements in the organization and management of schools. Its last meeting was held in Washington, September 28 to October 3, 1908. Its object was a thorough discussion of the public school as a safeguard to public health, and in order to make this more impressive, the meeting was held in conjunction with the tuberculosis congress in Washington, held at the same time. The exhibition prepared for this congress was utilized to illustrate the lectures on school hygiene. The programme was varied and was carried out by the chairman, Supt. George I. Aldrich, of Brookline, Mass. The papers read dealt chiefly with the hygienic features of public education. The chief speakers were Dr. Pearce Kintzing, of Baltimore; Prof. A. Duncan Yocum, of Philadelphia; Mr. Milton Fairchild, of New York; Miss Julia Richman, of New York; Representative J. van Vechten Olcott, of New York; Dr. Adolph Knoph, of New York; Health Commissioner Thomas Darlington of New York; and others. The association resolved to extend its activity to the entire country and abandon the word "eastern" in its name and constitution.

INTERCOLLEGIATE CIVIC LEAGUE: COMMONWEALTH CLUB OF THE UNIVERSITY OF WISCONSIN.

[Statement made to the Bureau by Mr. Gustave W. Buchen.]

The Commonwealth Club of the University of Wisconsin was organized in the spring of 1908 for the purpose, as its constitution states, "of developing higher ideals of social and political service among its members; and of arousing within the student body of the University of Wisconsin a lively interest in public affairs.

The club is one which, with some 30 or 40 others in the leading colleges and universities of the country, constitute the Intercollegiate Civic League. The central organization is located in New York City, but it acts only in an advisory capacity. The clubs make their own

constitutions and rules, and outline their programmes, cooperating with the league only when some definite concerted action is necessary. Each year one or more delegates are sent to the national convention at New York, where the executive committee is elected and the reports of the work of the various clubs are made.

The Commonwealth Club of the University of Wisconsin is closely connected with the department of political science, and members are selected with reference to reasonable scholarship combined with a keen interest in public affairs. The membership is limited to 40, not by thought of exclusiveness, but by a desire to secure capable, active men and an efficient working organization. The members are selected only from the junior and senior classes and from the graduate school.

The officers for the ensuing year are as follows: President, Reuben McKittrick; vice-president, Raymond T. Zillmer; secretary-treasurer, Clarence C. Tolg.

The work carried on by the various clubs in the Intercollegiate Civic League differs according to the communities in which they are located. Some of the clubs confine their activities to the student body, encouraging them, irrespective of party, to work and vote for worthy candidates for office. Other clubs in large cities cooperate with the good-government leagues in their fight against graft and corruption. The Commonwealth Club of the University of Wisconsin has not extended its activities along these lines. Regular meetings were held during the year, at which papers were read and discussions held on subjects of vital political and social interest, with special reference to conditions in Wisconsin. Realizing, however, that this plan limited its field of usefulness, the club has decided on a new and broader course of action. By virtue of the close relation existing between the university and the State, the former is able to render valuable assistance in administrative work and in guiding the policies of the State for the good of the Commonwealth. At the special session of the legislature which is to be convened in January, 1910, several important matters are to come up for consideration, among them being guaranty of bank deposits, industrial insurance, income tax, and water power and dams. With a view to aiding in the consideration of these problems, the Commonwealth Club has been divided into four sections, each section to make a thorough study of one of the above-mentioned subjects. From time to time reports of their progress will be made to the club, and finally the members will appear before the legislative committees and present the results of their investigation. In this way the club hopes to be of direct service to the State by aiding it in progressive and scientific legislation.

Nor are the larger aspects of a club of this kind to be overlooked. Our political system has become so complicated and oftentimes so

inefficient that enlightened democracy demands enlightened leaders. It is from our colleges and universities that the greatest portion of our future leaders is to come. It is therefore highly important that the college man be not only a trained man, but a man of steady purpose, stern resolves, and high ideals. These are the qualities which the Commonwealth Club seeks to instill in its members; and if its mission is fulfilled, it will be a potent force in the fight for clean politics.

NATIONAL EDUCATION ASSOCIATION.

Report of the Secretary to the Commissioner of Education.

WINONA, MINN., *September 9, 1909.*

MY DEAR SIR: By the provisions of section 4 of the act of incorporation of the National Education Association by Congress, approved June 30, 1906, I am required to render to you, on behalf of the corporation of said association, an annual report stating the amount of property, real and personal, held by the corporation, and the various receipts and expenditures during the past year.

I am submitting herewith such a report, as follows:

The association holds as personal property approximately 10,000 volumes of proceedings in the depository of the association at the office of the secretary in Winona, Minn., valued at \$10,000; 5,000 pamphlets and reprints, valued at \$800; office furniture, cases, and equipment, valued at \$500; total personal property at Winona, \$11,300.

An office is maintained in the city of Washington at 1360 Fairmont street, in accordance with section 8 of the act of incorporation, but the association owns no property, real or personal, in the city of Washington.

The business of the association is transacted at the office established by authority of the board of directors at Winona, Minn.

The association has a permanent invested fund, referred to in section 7 of the act of incorporation, which is the charge of the board of trustees. This fund, at the close of the last fiscal year, June 30, 1909, amounted to \$170,000, as per the accompanying Exhibit A, which constitutes the twenty-third annual report of the board of trustees.

You will note that the net revenue from this fund amounted to \$6,743.17, which was transferred to the treasury of the association for current expenses.

The fiscal year of the association is from July 1 to the following June 30, the last fiscal year closing June 30, 1909. For this last fiscal year the total receipts for current expenses from all sources

were \$37,418.67; the total expenses for the year were \$33,609.67; leaving a balance in the treasury June 30, 1909, of \$3,809.

The chief sources of revenue are:

- Membership fees;
- Proceeds of sale of volumes and reports;
- Revenue from the invested fund.

The chief sources of expense of the association are:

- The printing and distribution of the annual volumes;
- The maintenance of the secretary's office and clerical force at Winona, Minn.;
- The expense of preparing for and conducting the annual convention.

While a large part of the revenue comes from the associate membership fees received at the annual convention, a still larger amount comes as annual dues of \$2 for each member from the 6,000 active (permanent) members of the association.

The last convention of the association, held at Denver July 3 to 9, was in every respect successful; but no special action was taken which would probably be deemed essential or important to embody in this report.

I am, respectfully, yours,

IRWIN SHEPARD, *Secretary.*

HON. ELMER ELLSWORTH BROWN,

Commissioner of Education of the United States,

Washington, D. C.

EXHIBIT A.

Exhibit A, referred to in the foregoing report of the secretary of the association, consists of the Twenty-third Annual Report of the Board of Trustees, for the year ending June 30, 1909. This report is taken up with a detailed statement of the permanent fund of the association, which amounted on July 1, 1909, to \$170,100. There had been \$72 added to it during the year. Following is a summary of the principal items:

Income account.

Receipts:		
Income from various bonds and mortgages	\$6,849.41	
Interest on cash balance in bank	102.17	
Income of property in Chicago	186.28	
		<u>\$7,137.86</u>

Disbursements:

Transferred to principal account	72.00	
Accrued interest on bonds	55.56	
Fees of banks	267.13	
Net income paid to treasurer of association	6,743.17	
		<u>7,137.86</u>

Principal account.

Receipts:		
Cash on hand for investment July 1, 1908	\$925.50	
From bonds and mortgages paid	19,000.00	
Transferred from income account	72.00	
		<u>\$19,997.50</u>

Disbursements:

For purchase of bonds	19,000.00	
Cash on hand for investment July 1, 1909	997.50	
		<u>19,997.50</u>

Securities held for the permanent fund.

Municipal and school bonds-----	\$92,440.00
Railroad bonds-----	68,662.50
Real-estate mortgages-----	2,500.00
Real estate (4762 Lake avenue, Chicago)-----	5,500.00
Cash on hand awaiting investment-----	997.50
Total -----	170,100.00

Property at 4762 Lake avenue, Chicago.

Receipts:	
Rents received -----	\$360.00
Disbursements:	
Taxes and special assessments-----	\$102.37
Repairs -----	13.35
Allowance to tenant-----	40.00
Bank fees on rents collected-----	18.00
Net income -----	186.28
	360.00

The report is signed by the trustees as follows: Nicholas Murray Butler, James M. Greenwood, Henry B. Brown, Carroll G. Pearse, and Lorenzo D. Harvey.

The total registration of the Denver convention (the forty-seventh) was about 6,000. While, therefore, not the largest in point of numbers, it was one of the most important in its results, and particularly in the stimulus given to industrial education. The three great features of the convention were those bearing upon industrialism, hygiene, and morals in education. These have become permanent factors in the educational system of the United States and will continue to occupy the highest rank.

The following officers were elected for the ensuing year: President, State Supt. James Y. Joyner, of North Carolina; vice-presidents, Lorenzo D. Harvey, of Wisconsin (the outgoing president), Harvey B. Work, of West Virginia, Mrs. Katherine M. Cook, of Colorado, W. M. Holloway, of Florida, M. B. Stevens, of Maryland, W. J. Kerr, of Oregon, T. H. Harris, of Louisiana, F. B. Dyer, of Cincinnati, and L. E. Wolf; treasurer, Arthur H. Chamberlain. Irwin Shepard remains secretary, having been given that office for life.

A vote taken by the directors favored San Francisco as the place of next year's meeting.

DECLARATION OF PRINCIPLES AND AIMS.

The following declaration of principles and of aims was made by the association in convention assembled:

The National Education Association, now holding its forty-seventh annual convention in Denver, representing teachers and friends of education in every State of the Union, makes the following declaration of principles and of aims:

1. A free democracy can not long continue without the assistance of a system of state-supported schools, administered by the chosen agents of the people and responsible to the people for its ideals, its conduct, and its results. The com-

manding position of the American people is largely due to the general diffusion of knowledge and culture by its free schools.

2. Our system of state-supported schools must include elementary schools, secondary schools, schools for the training of teachers, and state universities. The changed conditions of the twentieth century also demand the establishment of free schools whose purpose shall be the training of our youth for commerce and the industries, as well as for the professions.

3. The purpose of our system of free common schools must continue to be chiefly culture for the individual and the transmission to posterity of the results of investigations and deliberations of the past. Our free schools must advance along the lines of educational democracy in the sense that they must provide equal educational opportunities for all. Although they must give practical preparation, not only for the professions but also for commercial life, the demands of any part of the business world that courses of study be subordinated to particular interests is not in accord with the proper aims of a national system of common schools.

4. A system of common schools that will meet the needs of the times must be democratic in its purpose and its administration; must recognize the importance of expert supervision, of better and more numerous high schools, of better and more numerous schools for the training of teachers, of a merit system for the appointment and promotion of teachers; and it must exclude fraternities and secret organizations of every sort from the social life of the school.

5. The common schools of our country must recognize more fully than ever the necessity of training our youth for citizenship. The perpetuation of democracy depends upon the existence in the people of that habit of will which is justice. Liberty under law is the process for attaining justice which has thus far been most successful among civilized men. The call to citizenship is a call to the exercise of liberty under law, a call to the limitation of liberty by law, and a call to the pursuit of justice, not only for one's self but for others.

6. The National Education Association indorses the purpose of the American School Peace League. The association believes that the principles of the league will make for effective citizenship, and urges all teachers to acquaint themselves with the work of the league and to cooperate with it.

7. The increased tendency to congestion of population in cities makes necessary greater and more systematic attention to the physical development of our children. No vigorous race of people has long maintained a high state of civilization under conditions that did not take into consideration the physical as well as the mental and moral development of its youth. The association recommends that provision be made by the United States Bureau of Education for effective promotion of physical education through the diffusion of scientific information on this subject.

8. The National Education Association approves the ever-increasing demand for better qualified teachers in the common schools. This higher standard must lead logically to a longer tenure and to a compensation more nearly commensurate with the quality of preparation and with the nature of the service rendered.

9. The National Education Association heartily indorses the use of school buildings and all school equipment for community interests and social betterment.

10. The National Education Association indorses the movement to consolidate the rural district schools wherever practicable, and expresses the hope that this movement will be encouraged until the children of rural communities enjoy the benefits of public education to an extent approximating those now supplied to children of urban communities.

11. The National Education Association gives its hearty indorsement to the work of the National Bureau of Education, the Carnegie Foundation, the General Education Board, and all associations, institutions, and organizations that are working to develop and promote the educational interests of the country.

Respectfully submitted.

EDWIN G. COOLEY, *of Massachusetts, Chairman;*

JOHN H. PHILLIPS, *of Alabama;*

CHARLES H. KEYES, *of Connecticut;*

AUGUSTUS S. DOWNING, *of New York;*

SYLVANUS L. HEETER, *of Minnesota,*

Committee on Resolutions.

Adopted by unanimous vote of active members in session, July 8, 1909.

IRWIN SHEPARD, *Secretary.*

REORGANIZATION OF DEPARTMENTS.

The committee on reorganization of departments, Alfred Bayliss, chairman, presented to the board a report containing a number of recommendations which, as finally amended, read to the following effect:

First. That the department of school administration be consolidated with the department of superintendence; the department of child study with the department of normal schools; the department of business education and science instruction with the department of secondary education; the departments of art education and manual training and of rural and agricultural education with the department of technical education, and the department of kindergarten education with the department of elementary education.

It further recommends that the department of special education and the library department be discontinued as such, their subjects being intimately associated with the other subjects of elementary, secondary, and higher education.

Second. That the department of Indian education be cordially invited to continue to hold its meetings with the National Education Association, and to maintain an affiliated relation corresponding to that of other societies and associations now meeting with this association.

Third. That the consolidated department of child study and normal schools be hereafter designated as the "department of professional preparation of teachers."

Fourth. That the department which shall include art education, manual training, rural and agricultural education, technical instruction, and domestic science (the last named not represented as such in the present organization) be designated as the "department of industrial education."

Fifth. That the department of women's organizations be designated as the "department of school patrons."

Sixth. That the regular departments of this association be as follows until otherwise ordered by the board of directors:

1. The national council of education.
2. The department of superintendence.
3. The department of professional preparation of teachers.
4. The department of elementary education.
5. The department of secondary education.
6. The department of higher education.

7. The department of industrial education.
8. The department of school patrons.
9. The department of music education.

TRAVELING SCHOLARSHIPS.

At a meeting of the new board of directors, held July 8, 1909, the committee on traveling scholarships reported that, in view of the uncertainty of the financial outlook of the association, no appropriation for traveling scholarships could be made at that session.

CORRESPONDING MEMBERS OF THE NATIONAL EDUCATION ASSOCIATION
(ELECTED AT THE DENVER MEETING, 1909).

England:

- Alfred Mosely, C. M. S.,
Union Bank Buildings, Ely Place, London, E. C.
- Prof. Henry Armstrong,
55 Granville park, Lewisham, S. E., London.
- J. Struthers,
Secretary to the committee of council on education in Scotland, 55
Whitehall, London.
- R. Blair,
Care of education department, Victoria Embankment, London, W. C.
- H. T. Gerrans,
Bursar of Worcester College, Oxford.
- Sir Edward Henry Busk,
Vice-chancellor of the University of London.
- T. Gregory Foster, Ph. D.,
Provost of University College, London.
- Henry Jones, Ph. D.,
Professor of moral philosophy in the University of Glasgow.
- J. St. Lee Strachey, M. A.,
Editor of the Spectator, London.

Denmark:

- Otto Jespersen, Ph. D.,
Professor of English philology in the University of Copenhagen.
- Harald Höffding,
Professor of philosophy in the University of Copenhagen.

Germany:

- Ulrich von Wilamowitz-Möllendorff,
Professor of classical philology in the University of Berlin.
- Prof. Dr. W. Pazzkowski,
Director of the bureau of information, University of Berlin.
- Prof. Dr. F. Klein,
Professor of mathematics in the University of Göttingen.
- Geheimrat Dr. Friedrich Schmidt,
Ministerial director, Cultus Ministerium, Berlin.
- Geheimrat Dr. Reinhardt,
Cultus Ministerium, Berlin.
- Prof. Dr. H. Münch,
Professor of education in the University of Berlin.

France:

M. Louis Liard,

Vice-rector of the University of Paris.

M. Ernest Lavisse,

Director of the École Normale Supérieure, Paris.

Prof. Émile Boutroux,

Director of the Fondation Thiers, Paris.

NORTH CAROLINA COUNTY SUPERINTENDENTS' ASSOCIATION.

[The annual meeting of the North Carolina County Superintendents' Association was held at Hendersonville August 31 to September 3, 1909. The following information regarding the meeting was communicated to the Commissioner of Education by Dr. Wickliffe Rose, general agent of the Peabody education fund.]

1. The meeting was called, arranged, and conducted by the state superintendent of education. Attendance on the part of county superintendents is required; each county bears the expense of its superintendent.

2. There are 98 counties in the State; there were 89 superintendents present at this meeting.

3. They were in session five hours a day for three days. All were present all the time. It was a business meeting from beginning to end.

4. There were no addresses; the discussion of each topic came to final definition in a clear-cut, practical programme of activities.

5. To the state department of education has been added a state supervisor of teacher training. Mr. Bivins, the present incumbent, had charge of the discussion of Topic I, "Teacher training." The discussion was devoted to defining a plan for improving the teachers now in the service. The outline in the programme suggests the plan which he proposes to put into operation in all the counties of the State.

6. Another recent addition to the state department of education is the state inspector of elementary rural schools. For the present this work is to be maintained by the Peabody fund. Mr. Brogden has been appointed and began his work at this meeting. He led the discussion of Topic II, "Supervision and inspection of elementary schools."

7. The secretary of the state board of health was present and opened the discussion of Topic III, "Public health and the public school as a factor in the promotion of it." A number of physicians were present. There is no more live question in North Carolina to-day than this one of public health. The schools are taking it up with an earnestness that promises definite and far-reaching results. The school-improvement leagues are organizing a campaign against the fly, the mosquito, the hook-worm, typhoid, and tuberculosis.

8. The state high-school inspector conducted the discussion on "Public high schools" (Topic IV). The whole time was devoted to

clearing up points of difficulty which had arisen in the practical administration of these schools. With the system only 3 years old, the State now has 176 high schools in operation. The feature of this discussion was the active and intelligent way in which the county superintendents are beginning to handle this new problem of supervision.

9. Another recent addition to the state department of education is a supervisor of agricultural education. This work is identified with the state department and the Agricultural and Mechanical College, and is supported by the General Education Board. The business of this man will be to organize the teaching of agriculture in the public schools. This man conducted the discussion of Topic V, "Agricultural instruction."

This meeting is significant as indicating growth in supervision in the South. The state high-school inspector, the state inspector of elementary rural schools, the state supervisor of teacher training, the supervisor of agricultural education are so many new arms by which the state department of public instruction is reaching out and laying its hands upon the details of the State's educational business. This meeting of county superintendents with state superintendent and state supervisors in a three-day business session for the clearing up of practical problems of administration marks a long step forward in efficient business methods.

A meeting similar to this was held in August at Farmville, Va.

PLAYGROUND ASSOCIATION OF AMERICA.

The Third Annual Congress of the Playground Association of America was held at Pittsburg, Pa., May 10-14, 1909. Eighty-five cities in all were represented at the congress by 281 delegates, each of whom was accredited either directly by a municipality, an active playground association, a city park board, a board of trade, or some other organization directly concerned with the local extension and improvement of playground facilities.

Among the committee reports made to the congress was that of the committee on normal courses in play, which reported a tentative normal course; it is expected that this will be crystallized into a definite working curriculum, which many normal schools and university departments will offer in whole or in part. The committees on folk dancing and story telling endeavored to meet the demand for information in those matters by supplying lists of dances, music, stories, etc., together with complete bibliographies. A new application of organized play—the use of playground games and exercises and the social group system of the playground as a remedial agency in hospitals for epileptics and the insane, as well as a method of

achieving voluntary order and discipline in orphan asylums, custodial institutions, and reformatories—was strongly advised by the committee on play in institutions.

In connection with the congress there was held a conference of municipal representatives for the purpose of discussing the question of a "safer, saner Fourth of July;" 45 municipalities were represented by delegates at this conference. Among the points noted by the secretary in a general summing up of the sense of the conference was the following:

We indorse all movements for safe and sane civic celebrations, and it is the sense of this meeting that the Playground Association of America should aid such movements in a constructive way by preparing and distributing programmes for civic celebrations of Independence Day and other public holidays.

In addition to the municipal conference, there was a second spirited meeting, conducted by delegates from the various branches of the Young Men's Christian Association. The objects of the conference, as stated in the call for the meeting, were: (1) To consider what the Young Men's Christian Association has done and can do to promote playgrounds, either directly or in cooperation with other civic bodies; and (2) to review the work for athletics for boys and to determine the future policy which should be followed.

A play festival held on the concluding day of the congress exhibited the unwonted spectacle of 18,000 children playing organized games on a great playground nearly a mile square, while 50,000 other children and adults looked on and thoroughly enjoyed the sports of the little players. This festival showed in practice four important phases of playground life: (*a*) The free play of children; (*b*) the spirited athletic contests between teams of boys, in which playground, school, neighborhood, and team loyalty is strongly in evidence; (*c*) folk dancing on the lawns; and (*d*) the dramatic pageant, used as a means of instilling pride in city and country.

While this great play festival was both in point of numbers and elaborateness of programme the chief exhibition feature, three other festivals and exhibitions illustrating certain phases of playground work are also worthy of special mention. One of these festivals dealt with games for little children; the second showed what could be accomplished in industrial and art training in the regular playgrounds, and how these studies could be made certain rivals of ordinary play; the third festival demonstrated how under proper training vocal music could be made a most effective feature of recreation-center work.

The following information, showing the progress of the playground movement and illustrating some of the different directions it is

taking, is compiled from the report of Henry S. Curtis, secretary of the congress:

The growth of the last few months has been many-sided. The cities generally are appropriating considerably more money for maintenance than they did last year. In many cities the season is being extended in the school playgrounds to include a considerable part of the school year as well as the vacation. There is a general tendency to lengthen the playground day so as to include the afternoon and evening session, and there has been a great increase of interest in the school as a social center.

The tendency among wealthy men to contribute memorial playgrounds to home cities, which began to be noticeable last year, has increased until there is now a large number of such playgrounds.

Throughout the country probably the most significant single event has been the Massachusetts playground law. This is essentially a local-option law. It has required every city of 10,000 or more inhabitants to vote as to whether or not it would maintain playgrounds. Thus far 42 cities have voted, and 40 have voted favorably. The State of New Jersey passed an enabling act in 1907 and the State of Ohio in 1908. A law has been passed in the last few days by the State of Minnesota permitting cities of 50,000 inhabitants to issue bonds to the extent of \$100,000 to acquire and improve sites for playgrounds. Playground laws are now pending before the legislatures of the States of Montana and Indiana.

A very significant movement during the last eight months has been the tendency of the various municipalities to form playground commissions to look into the needs of the cities and make plans for the future. Some of the cities that have appointed such commissions are Minneapolis, San Francisco, Oakland, Berkeley, Philadelphia, and New York. A movement that has been begun during the past few months is a movement to correlate all the work for children through a juvenile commission. Such a commission has been recently organized in Hartford. Of even greater interest in idea is the new recreation commission of New York City, though it is still in the initial stage. This is of great interest, because it plans to inventory all the recreational facilities of the city and try to make them adequate to actual needs.

A very interesting experiment has been tried in Buffalo in the way of organizing tramping trips with the playground children. The school journey, which often takes the children off on walking trips which last two or three weeks, is very popular in Germany, and is one of the things regularly promoted by the German association. Such trips are also conducted on an extensive scale by the People's Palace of London. The Chicago Playground Association has been conducting similar trips for the last two years, but there they are for the adults instead of children.

One of the most suggestive things along the line of equipment is the report of Mr. L. W. Rapeer of the work that has been done by his school in Minneapolis. The school has made all of an extensive equipment for its own playground. Such a playground is worth far more to the children than any playground that can be bought.

The congress adopted the following summary statement of its beliefs and its sphere of work:

We believe that the main work of this association as an association should be not the promotion of playgrounds, but of the ideals of the movement.

We take as our proper province the promotion of the play spirit and play opportunities everywhere for all ages and both sexes. We believe that there are very many other play opportunities essential to the development of child and community life besides those offered by the normal playground, and we regard the making available for play the dooryards, vacant lots, streets, interior of the blocks, and the roofs of tenements, armories, and other suitable buildings as no less important than the playgrounds themselves.

We regard the promotion of play festivals, picnics, tramps, summer camps, the school journey, play periods in connection with the school, and all sorts of activities that call the people to a recreative life in the open air as legitimate objects of our endeavor.

We believe, also, that we should aim to show to the modern factory and business world ways in which the grinding drudgery of monotonous conditions can be relieved by recreational elements which may add a play interest to work.

RELIGIOUS EDUCATION ASSOCIATION.

The Sixth General Convention of the Religious Education Association was held in Chicago, February 7-13, 1909. Over 40 separate meetings were held and 118 addresses delivered and papers read. Resolutions were adopted, among others, (*a*) affirming the necessity of industrial education, not only for economic reasons, but also to humanize industrial life, always with the understanding that in conducting it the primacy of the moral aim is to be recognized, and the development of character held in view; (*b*) urging upon colleges, universities, and theological seminaries the establishment of courses looking toward the preparation of teachers of religion.

Among the activities of the association during the year 1908 have been, (1) the Washington convention, with 27 important meetings; (2) over 200 conferences and institutes on moral and religious training; (3) the publication of a volume of 350 pages, entitled "Education and National Character;" (4) the promotion of special work by the departments; (5) increased cooperation with general denominational and educational societies looking toward improvements in moral and religious training; (6) the maintenance of the work of the bureau of information, answering inquiries and aiding teachers, schools, churches, etc.; (7) development of the library and permanent exhibit, including its removal to quarters at the very heart of Chicago; (8) strengthening the membership numerically; (9) a financial campaign which has practically ended the long struggle with old debts; (10) extensive preparations for the sixth general convention.

Prof. George Albert Coe, of Northwestern University, was elected president of the association for 1909, and Mr. Henry Frick Cope, of Chicago, general secretary. Nashville was selected for the 1910 meeting.

COMMITTEE ON WEEK-DAY RELIGIOUS INSTRUCTION.

The Federal Council of the Churches of Christ in America, at its last meeting in Philadelphia, December 2-8, 1908, passed the following resolution:

We hereby invite the National Education Association and the Religious Education Association to appoint committees to confer with the committee of this body, to be appointed by its executive committee, made up of at least one member from each of the constituent bodies of this council, for the full consideration of ways and means to promote week-day religious instruction; the committee of this council to report to the executive committee, and at the next meeting of the federal council.

In accordance with this action committees were appointed by the Federal Council and the Religious Education Association, and a preliminary meeting of the joint committee was held at Chautauqua, N. Y., July 15-16, 1909, with Mr. Henry F. Cope as secretary. Concerning this meeting Mr. Cope writes to the bureau:

The following persons were present: Rev. W. H. Boocock, Prof. G. A. Coe, Rev. E. B. Sanford, Prof. C. W. Votaw, President A. T. Perry, and H. F. Cope. Doubtless on account of the meeting following so closely the National Education Association convention no official representatives of the National Education Association were present. A temporary organization was determined on by the election of the presidents of the committees from the three bodies, namely, the Federal Council, the National Education Association, and the Religious Education Association, as an executive committee with authority to call a joint committee meeting and, preceding this meeting, to conduct the necessary correspondence with reference to several lines of investigation which were proposed.

REQUIREMENTS FOR ADMISSION INTO THEOLOGICAL SCHOOLS.

While theological schools do not always announce the requirement of a bachelor's degree for admission, they usually indicate clearly that for the full and regular courses of instruction graduation from college or equivalent education is necessary. In fact the regular courses, which include Hebrew, Greek, etc., could not be pursued successfully without a collegiate education. Promising students with less education may be admitted to special courses, and for such students English courses are provided in a few schools, but those who wish to complete the full regular course must be college graduates. Catholic students receive instruction in both philosophy and theology in the same school.

RURAL LIFE CONFERENCE HELD AT THE UNIVERSITY OF VIRGINIA.

A conference was held at the University of Virginia summer school in 1908 to discuss the problems of rural life. The success of this conference led to the calling of a second one, which was held at the same

school July 13-16, 1909. Aided by the interest in the subject developed by the Federal Commission on Country Life, the conference was able to bring together a most interesting group of speakers. Addresses were given upon the following subjects: "Possibilities of extension work in Virginia;" "The country school and its neighbors;" "Rural life attractiveness;" "Extension work in the West;" "School extension;" "Boys' and girls' clubs;" "The traveling school;" "Forestry and conservation of resources;" "School agriculture in its relation to the community;" "The agricultural revolution—what it means and how it is to be brought about;" "A practical lesson in agriculture;" "A cooking lesson in a country school;" "How to reduce the death rate among farm children from typhoid and anemia;" "Adulteration of foods."

SOUTHERN ASSOCIATION OF COLLEGE WOMEN.

The Southern Association of College Women held two meetings at Atlanta, April 15 and 16, 1909, in connection with the Twelfth Conference for Education in the South. The meetings were well attended. In addition to a word of greeting from Mrs. John King Ottley, speaking for the club women of Atlanta, and from Miss Emily McVea, Dr. Lillian W. Johnson, and Miss Celeste Parish, representing the founders of the association, the following subjects were discussed: "The physical betterment of school children," by Miss Edith Howe, chairman committee on physical welfare of school children, National Congress of Mothers; "A plan for concerted work in education by the club women of five national organizations," by Dr. Laura Drake Gill, president of the Association of Collegiate Alumnae; "Illiteracy and compulsory school attendance laws," by Dr. Elmer Ellsworth Brown, United States Commissioner of Education. President of the association, Mrs. Emma Garrett Boyd, Atlanta; secretary-treasurer, Miss Eula Denton, San Antonio. (Proceedings of the conference.)

SOUTHERN EDUCATIONAL ASSOCIATION.

The Southern Educational Association met at Atlanta, Ga., December 29-31, 1908. Among the topics that were given prominence in the proceedings were: "Improvement of public schoolhouses and grounds;" "The high school;" "Education of the negro;" "Vocational education;" "Secondary agricultural education in the Southern States;" "Education and public health." Resolutions were adopted favoring public industrial education; recommending a broader and higher training for teachers; appreciating the work of voluntary organizations that cooperate with educators in improving the social and physical conditions of the school population; indorsing the sani-

tary supervision of schools; and approving the Davis bill, to grant federal aid to agricultural high schools.

Secretary H. E. Bierly writes that—

The meetings of the board of directors were largely given to the development of the organization and the formulation of plans for active and effective work. The board organized a southern educational council, composed of 30 of the ablest educators in the South, which will have for one of its main objects the making and publishing of investigations by special committees appointed for this purpose, together with the formulation of the policy of the association.

An organizing committee consisting of Prof. P. P. Claxton, chairman, President D. B. Johnson, and President J. W. Abercrombie was appointed. The principal officers for 1909 are Supt. James H. Van Sickle, Baltimore, Md., president; Prof. H. E. Bierly Chattanooga, Tenn., secretary. The following statement of the organization, field of work, and activities of the association is taken from a circular issued in the summer of 1909:

PLACE AND DATE OF NEXT MEETING, AND DEVELOPMENT OF THE ORGANIZATION.

The next meeting of the Southern Educational Association will be held at Charlotte, N. C., on December 28, 29, and 30, 1909, in response to cordial invitations from the educators of the State and the citizens of Charlotte. This promises to be the largest, most important, and notable educational gathering that ever assembled in the South. It is the first meeting to be held since the extensive and complete organization of the association recently effected. The last meeting at Atlanta, during the Christmas holidays, was the largest and best in its history. Hitherto the organization has had few departments devoted to special lines of work, but realizing that it was not so active and effective as it should be in organizing the educational forces and in developing educational literature adapted to southern needs and conditions, and that it had great possibilities, opportunities, and obligations in this constructive period of southern education, the association now has developed an organization almost as extensive as the National Educational Association.

ITS TERRITORY AND DEPARTMENTS.

The Southern Educational Association has for its special territory the States of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia, and District of Columbia, and has the following departments: Southern educational council, department of higher education, department of secondary education, department of normal education, department of superintendence, department of manual and industrial education, department of higher technical education, department of drawing and art, department of physical education, department of libraries, department of child study, department of kindergarten, department of music, and department of the southern organizations of women.

DEPARTMENT OF COOPERATIVE COMMITTEES.

Besides increasing the number of departments the association has just appointed cooperative committees for each of its departments, so that the departments are actively represented by 15 individuals in each State, each of whom

is the leading specialist in that State in the work of his department. It is the duty of members of cooperative committees to work up the special phase of education in their respective States and help the president of the department in developing the best plans and in selecting the best persons and subjects for the annual programme.

COMPILATION OF BIOGRAPHICAL EDUCATIONAL DIRECTORY OF SOUTHERN STATES.

The association is also compiling a biographical educational directory of the Southern States only, by means of which it will learn directly the special educational ability and lines of past, present, and future interest, study, or research in which men and women of special ability are engaged, some of whom are not yet so widely known and all of whom the association needs. Thus, by means of the biographical educational directory and the cooperative committees, special educational ability is found out, organized, and more fully utilized than it otherwise would be by the association in its work in advancing the cause of education. The association is conducting an extensive and vigorous campaign to increase its membership, and is meeting with great success, as a large number have identified themselves with the organization since the last meeting.

SPECIAL INVESTIGATIONS AND REPORTS.

The association has just organized a southern educational council, composed of 30 of the ablest educators in the South, which will have as one of its main objects the making and publishing of investigations by special committees appointed for this purpose, together with the formulation of the policy of the association. What is greatly needed is more correct knowledge of southern educational conditions. These investigations and reports will be valuable contributions to southern educational literature.

THE PROGRAMME.

The officers of the association are arranging one of the best and most attractive programmes both for the general sessions, which are held during the forenoons and nights, and the department meetings, which are held in the afternoons. Some of the very ablest educators in our country have accepted invitations to participate in the discussion of the larger civic and general educational problems of the general sessions as well as in professional aspects of education in the department meetings. Several southern governors, United States Senators, Members of Congress, and a few European ambassadors will honor the association with addresses. Among the subjects that will be discussed in the general sessions are the following: Educational ideals and problems of the new South as compared with the old South, the industrial development of the South, the development of southern rural life and the public schools in relation to it, the movement for the improvement of school-houses and grounds, the call for educational citizenship, national aid to southern schools, educational legislation and progress during the year, the trend of state administration of public schools, present status of illiteracy in the Southern States, methods of state and local taxation for public schools, present conception of negro education in the South, methods of educational campaigns, the service of the state university, present status of college education, higher education of women, the movement for the education of adults, the supervision of rural schools, the improvement of teachers in the South, southern summer

schools, development of rural high schools, secondary agricultural education in the South, secondary education in Europe, European and American trade schools, etc.

EDUCATIONAL EXHIBITS.

One of the most effective means of education is through carefully selected exhibits. The most progressive southern universities, colleges, and normal schools will make exhibits as to their equipments, special facilities, etc., bearing especially upon the professional preparation of teachers in secondary and elementary schools. Some of the most progressive southern industrial high and elementary schools, also several kindergarten schools, will exhibit the work done in their schools. The exhibits in general will be closely related to the different departments of the association, with considerable attention to the professional preparation of teachers, industrial education, etc. They will exhibit in the line of architecture, equipment, courses of instruction, etc., of higher institutions, normal schools, high schools, industrial schools, agricultural schools, etc. Apparatus for the examination of defective hearing, seeing, lung capacity, fatigue, etc., will be on exhibit and children examined by a specialist.

OTHER ORGANIZATIONS MEETING WITH THE SOUTHERN EDUCATIONAL ASSOCIATION.

The following organizations will meet with the Southern Educational Association: Southern Society of Philosophy and Psychology, Religious Educational Association, American School Peace League, Southern Association for the Improvement of Public School Houses and Grounds, etc. Among the associations that will be also invited are the following: Association of State Superintendents of the Southern States, Southern Association of College Women, Editorial Press, Association of the Southern States, etc.

OTHER ASSOCIATIONS AND CONFERENCES.

Information regarding the following associations and conferences is given on the pages indicated:

American Home Economics Association, page 178.

American-Scandinavian Society, page 205.

Association of American Agricultural Colleges and Experiment Stations, page 137.

Association of American Universities, page 92.

Conference on the Care of Dependent Children, page 239.

Council on Medical Education of the American Medical Association, page 129.

Higher Education Association, page 93.

Music Teachers' National Association, page 134.

National Association of Cosmopolitan Clubs, page 214.

National Association of State Universities, page 88.

National Society for the Promotion of Industrial Education, page 150.

North Central Council of State Normal School Presidents, page 114.

III. UNIVERSITIES AND COLLEGES—HIGHER EDUCATION.

NATIONAL ASSOCIATION OF STATE UNIVERSITIES.

The thirteenth annual meeting of the National Association of State Universities was held at Washington, D. C., November 15–16, 1908.

The committee on recognition of the state universities by the Carnegie Foundation submitted a report detailing the progress of their endeavors to secure such recognition, and announcing their final success. The state universities are now placed in the same relation to the foundation as private institutions, except that they are subject to the following conditions:

In the case of tax-supported institutions the applications must be accompanied by the approval of the governor, and of the legislature of the State or province in which the institution is situated. The trustees of the foundation reserve the right to decline the application of any such institution if it is subject to a political control or interference which, in the opinion of the trustees of the foundation, impairs its educational efficiency. A tax-supported institution must be in receipt of an annual income of not less than \$100,000.

Through the munificence of Mr. Carnegie, \$5,000,000 have been added to the endowment of the foundation, to meet the increased demands that will be made upon it through this action.

REPORT OF THE COMMITTEE ON STANDARDS.

The committee on standards of American universities made at this meeting of the association its first full report. The committee had originally been appointed in 1905 under a resolution that read:

That a committee be appointed that shall report later to this body upon standards for the recognition of American universities and upon standards for the recognition of the A. B. degree and higher degrees.

The report of the committee, after having been debated at great length and amended in certain particulars, in its final form as adopted by the association contained the following statements and recommendation:

Your committee believe that there are certain clearly marked tendencies or forces at work in our American society toward the development at no distant date of a typical institution of learning which we may not improperly call the standard American university.

This institution will, for an indefinite time, include as an important part of its organization what we may call a standard American college with a four years' curriculum with a tendency to differentiate its parts in such a way that the first two years will be looked upon as a continuation of and a supplement to the work of secondary instruction as given in the high school, while the last two years will be shaped more and more distinctly in the direction of special,

advanced, or university instruction, rising gradually into the advanced work of the graduate school.

The standard American university will also include as a distinct department the graduate school or philosophical faculty.

It will also include as organic parts of the institution, in its fully developed form, various professional schools, such as law, medicine, and engineering.

Present tendencies point, in our opinion, then, to a definite differentiation in the work of the college at the close of the sophomore year toward university work in the real sense. If these views are just, we suggest the following formulation of principles underlying the organization of such an institution, and we may define the standard American university to be an institution—

1. Which requires for admission the completion of the curriculum of a standard American high school with a four years' course, or, if you prefer the statement, the completion of a course which will enable the pupils to offer for admission not less than 14 units of five periods each, or their equivalent.

2. Which offers in the College of Liberal Arts and Sciences two years of general or liberal work completing or supplementing the work of the high school.

3. Which offers a further course of two years so arranged that the student may begin work of university character, leading to the bachelor's degree at the end, and reaching forward to the continuation of this work in the graduate school or the professional school.

4. Which offers professional courses in law or medicine or engineering, based upon the completion of two years of college work.

5. Which offers in the graduate school an adequate course leading to the degree of doctor of philosophy.

It is recommended that this association recognize any institution, in whole or in part, doing work of this grade as, in so far, doing work of university quality.

In recommending that university work begin with the junior year of the college, and that the professional schools be based on the first two years of college, the report is in line with present tendencies. It is in accord with the growing belief that the work of the last two years of college should be organized into groups that aim at more definite results and lead to greater efficiency. But this is only the first of many problems. We are facing questions of the time beyond the junior year for attaining the Ph. D. degree, of adjusting the scheme of counting the last two years toward both arts and professional degrees, of the place of the A. B. degree, of the age when the period of general education should end, and of a possible reorganization of elementary and secondary education. But these questions are not ready for solution and hardly belong to the work of the committee at the present time.

It is to be noted that the definition of standards in terms of time are used as a matter of convenience, but there shall be due opportunity in individual cases to show equivalents. In the definition of units, it is recommended for collegiate entrance requirements that we recognize those now current in the North Central Association of Colleges and Secondary Schools and in similar associations, and those that have been indorsed by such associations which have come from associations of experts, and those in use by the college entrance requirements board.

- I. It is recommended, that not less than sixty year-hours or units of collegiate work be required for the bachelor's degree.

- II. *Qualifications of teachers and institutional facilities.*—It is expected that the scholastic qualifications of the teachers in the high schools should be not less than the bachelor's degree or the equivalent, and it is recommended that it be a master's degree. As a rule, the professors of all grades in the collegiate

work shall have the degree of doctor of philosophy or its equivalent. The professors giving the instruction in graduate work are expected to show, in addition to the possession of a doctor's degree or its equivalent, their scholastic ability by successful research and publication, and above all, they must have demonstrated that they have power as teachers to inspire the students with zeal for research. Indeed, it is understood that all the teachers should possess the power of imparting knowledge and of character building. In addition, the professors in the professional schools should give evidence of doing investigative work, and those in technical schools the power of practical research.

III. *Equipment*.—1. There should be adequate general and departmental libraries with:

(a) Sufficient equipment in the way of duplicate books for purposes of undergraduate instruction.

(b) Where graduate work is offered, books, monographs, and other materials for purposes of research.

2. Modern laboratories and apparatus, with sufficient supervision for the undergraduate teaching, are demanded, and where graduate work is offered, research laboratories.

(In the use of the term "laboratories" we include not only those for the material sciences, with opportunity for proper field work, but also museums and the proper laboratories for the educational, political, and social sciences.)

IV. *Time units for degrees*.—Institutions providing for advanced work shall require three years, or 45 units, from the beginning of the junior year for the degree of master of arts, and five years, or 75 units, for the degree of doctor of philosophy, and with work in residence. The units are not necessarily schedule hours in graduate work, but their equivalent, and include credit for research and thesis work. It of course is understood that from the beginning of the junior year there is the adoption of the group system suggested by the honor schools in English universities or the separate faculties in the German universities, and that the kind of instruction contemplates investigation—in short, science with power—as the purpose. It is the intent that the cultural atmosphere shall pervade the work of the student who begins specialization, and that something of the spirit of discovery and the earnestness it brings shall affect the cultural temper.

V. *Scope of curriculum*.—To be a standard university an institution shall be equipped to give instruction leading to the degree of doctor of philosophy in at least five departments, according to the standard prescribed in this report, and shall have at least one university professional school. The term "university professional school" shall not be applied to any professional school that does not require the two years' collegiate training for admission.

VI. *Provision for recognition and committee on standards*.—1. Provision shall be made whereby institutions other than state universities may be freely welcomed to adhere to the standards set up by this association.

2. There shall be a standing committee on standards of five, of which the honorable vice-president of this association shall be one. The committee on standards further may invite into conference representatives of other educational organizations interested in formulating standards. When institutions within or without the association seek to adhere to the standards, said committee shall have the power to recommend to this association for recognition institutions meeting these standards, and may, after report to this association and its approval, issue certificates to institutions, departments, and even to individual instructors.

3. The committee may employ assistance upon the approval of the executive committee, to be paid, together with necessary traveling expenses, from a fund

created for the purpose raised by appointment among the members of this association, in accordance with the sum expended by each institution for salaries.

The committee or their representative may, when invited, visit an institution applying for recognition, the expense of such visitation to be borne by the institution concerned.

4. In making recommendations as to institutions, the committee on standards shall give great weight to the character of the curriculum, the efficiency of instruction, the scientific spirit, the standard for regular degrees, conservatism in granting honorary degrees, and the spirit of the institution.

Upon motion, the association ordered that "this committee on standards shall report further upon standards and classification, and shall cooperate, so far as possible, with a similar committee of the Association of American Universities."

VII. This committee shall further be charged with the duty of correspondence with institutions and governments at home and abroad to gain proper recognition of graduates and students of these recognized institutions, departments, and individuals.

VIII. This association shall publish the standards that have been adopted, and from time to time the list of institutions adhering to them.

Respectfully submitted.

GEO. E. MCLEAN,
EDMUND J. JAMES,
WM. L. BRYAN,
JAMES H. BAKER,
Committee.

UNIVERSITY NOMENCLATURE.

An important report, presented by President Van Hise, of Wisconsin University, chairman of the committee on university nomenclature, was made the special order for the 1909 meeting. The report of the committee concluded with the following recommendations:

1. That the term "college" be restricted to a branch of the university, which has a considerable faculty devoted to teaching the special subjects of that branch. The following lines of work in the university should be organized as colleges:

- (a) Arts and sciences.
- (b) Medicine.
- (c) Law.
- (d) Engineering.
- (e) Agriculture.

2. That the term "school" be applied to a grouping of courses to a definite end, either in a single college or in two or more colleges. The following illustrations of the use recommended may be given: In the college of engineering there may be the schools of civil engineering, mechanical engineering, electrical engineering, chemical engineering, mining engineering, etc. In the college of letters and science there may be schools for the training of teachers, journalism, commerce, etc. An illustration of a school located in several colleges would be the graduate school.

3. That the term "department" be restricted to the various subjects taught in the university, as, for instance, the department of latin, department of mathematics, department of physics, etc.

4. That the term "course" be restricted to the subdivisions of a subject, as, for instance, course 1 in English.

5. That the term "division" be assigned a loose meaning to indicate groupings of the different branches of a university organization, or branches which do not adapt themselves to classification under the above terms, as, for instance, extension division.

If the above recommendations be adopted your committee further recommend that the National Association of State Universities urgently recommend to each president that at the earliest possible time the usages approved be adopted by the authorities of his institution and introduced into all of its official publications.

The officers of the association for 1908-9 are as follows: President, Jacob G. Schurman, Cornell University; vice-president, John W. Abercrombie, University of Alabama; vice-president (ex officio), Elmer Ellsworth Brown, United States Commissioner of Education; secretary-treasurer, George Emory Fellows, University of Maine; executive committee, the above officers and William O. Thompson, Ohio State University, and Frank Strong, University of Kansas.

The next meeting will be held in Boston, October 8 and 9, 1909.

ASSOCIATION OF AMERICAN UNIVERSITIES.

The Tenth Annual Conference of the Association of American Universities was held at Cornell University, Ithaca, N. Y., on January 7 and 8, 1909. Four sessions were held.

The special committee appointed and instructed to report on the standardization of the colleges and to recommend new candidates for membership in the association recommended the universities of Indiana, Iowa, Kansas, and Nebraska. These institutions were duly elected.

The special committee on nomenclature submitted recommendations which were adopted in part and in part referred back to the same committee for further consideration. Such of the recommendations as were adopted follow:

That the term "department" be restricted to the various subjects taught in the university, as, for instance, the department of Latin, department of mathematics, department of physics.

That the term "course" be restricted to the subdivisions of a subject, as, for instance, Course I in English.

That the term "college" be restricted to a part of the university, the standard of admission to which is the equivalent of that required by the Carnegie Foundation for the Advancement of Teaching, and which offers instruction leading to a first degree in arts, letters, or sciences.

That the term "school" be restricted to a part of the university, the standard of admission to which is not less than the equivalent of two years' work in the college and which offers instruction of not less than two years in duration leading to a technical or professional degree.

The terms "group," curriculum," and "division" were left for future definition.

The association consists now of the following universities: California, Catholic, Chicago, Clark, Columbia, Cornell, Harvard, Illinois, Indiana, Iowa, Johns Hopkins, Kansas, Leland Stanford Junior, Michigan, Minnesota, Missouri, Nebraska, Pennsylvania, Princeton, Virginia, Wisconsin, and Yale. The officers for 1909 are Princeton University, president; University of Virginia, vice-president; Harvard University, secretary. The next annual conference will be held at the University of Wisconsin.

HIGHER EDUCATION ASSOCIATION.

The Higher Education Association was incorporated at Albany, N. Y., on May 21, 1909, by Col. Chas. E. Sprague, Dr. Edwin E. Slosson, and Mr. Clarence F. Birdseye, of New York City. The purposes of the association as stated in the articles of incorporation are as follows:

(a) To improve higher education throughout the United States, and in particular the internal and external conditions of the American college, by furnishing an agency and funds whereby a careful study can be made and improvements can be brought about in the institutions of higher learning in the following ways, among others:

(1) In the financial department: A fuller and clearer treasurer's annual account; an improved and more complete system of bookkeeping; and through the development of an internal cost accounting system, in addition to the present method of merely accounting for the cash proceeds of trust and other funds, a more economical and intelligent administering of the resources, funds, and activities of the colleges.

(2) In the department of instruction: The improvement of the pedagogical training of those proposing to teach in colleges; the conservation of the health and other interests of the instructional forces; the increase of their compensation; the provision of pensions; the safeguarding and fostering of the interests of tutors, preceptors, assistants, and other grades of junior or associate instructors; and the improvement of the administrative and other conditions affecting the teaching forces, collectively or individually.

(3) In the department of the student life: The betterment of the college community life and of the college home life, whether in the fraternity home, the college dormitory, or the local boarding house; the restoration, so far as possible, of the individual training of the students, mentally, morally, and physically, during their college course and for their widest future usefulness as educated citizens.

(4) In the administrative department: The systematic study and wide adoption of better and more advanced college administrative methods to secure the most efficient use of the college capital in character building and scholarliness; the devising and putting into force of new units of internal valuation of student and instructional work; the reduction of college waste and the college waste heap in the student, instructional and other departments; the study of the college plant and field; the oversight and assistance of graduates; the bringing about, so far as is wise and desirable, of standardization and uniformity in

college methods and standards; the making possible of the interchange of students and instructors; the relieving of the instructors from administrative details and the putting of these under charge of administrative experts, whose duty it shall be to produce in every possible way conditions conducive to more efficient work of the instructional forces and to scholarship.

(5) In the department of citizenship: The study of the civics and economics of the college itself, and of its various planes and departments, and of the relations of the student-citizens to the college state, the college community, and the college home—all with reference to their future duties as citizens to their commonwealth, their community, business or profession, and their homes; the founding of chairs for the study of citizenship; the reorganization and fulfillment of the duties and responsibilities which the colleges themselves owe to the state as the capstones of a system of compulsory public-school instruction, which has educated, at the public expense, most of the students who enter the colleges; and the restoration of the clear conceptions which the earlier institutions had of their direct and high obligations to the state as its public servants, to which had been intrusted public and private funds and powers.

(6) And generally to furnish means to determine and fix the true present position of the college in our educational system; to minimize the danger of injury to the colleges because of the push of the preparatory schools from below and of the drain of the professional and graduate schools from above; and to inaugurate and foster an active forward movement in the development of the colleges and their curriculum.

(b) To print and publish a magazine or magazines and other periodicals, newspapers, pamphlets or books, and to do a general publishing business.

(c) To organize and carry on a bureau or department for the employment of professors, teachers, and others connected with college instruction or administration.

(d) To investigate, through experts or otherwise, the exact conditions prevailing in the colleges and to formulate plans to improve such conditions; to organize, develop, and maintain, within or without the State of New York, voluntary and unincorporated associations and assemblages of college alumni or others interested in the affairs of the colleges or their students whose direct object shall be to advance the cause of higher education and to improve the administrative, business, and financial situation in the colleges in order to insure that the revision of the place, policy, and ideals of the American college and the reorganization of its administration shall be in the hands of its friends and well-wishers; to raise and disburse the funds and money necessary or desirable to effectuate any of the purposes or objects of the company or the advancement of education within the United States.

The directors for the first year are Col. Charles E. Sprague, Hon. George B. Cortelyou, Dr. John H. Finley, Dr. Edwin E. Slosson, Dr. Virgil Prettyman, Mr. Clarence F. Birdseye, and Mr. Arthur H. Pogson, all of New York City. It is the purpose of the association to publish *The American College*, a magazine to be devoted to the interests of the college at large.

THE VILAS BEQUEST.

One of the largest gifts to the cause of higher education in recent years is that provided for in the bequest of Col. William F. Vilas, formerly United States Senator and member of President Cleveland's

Cabinet, who died on August 27, 1908. Under the provisions of his will, his estate will be held in trust for the benefit of the University of Wisconsin. During her lifetime Mrs. Vilas will receive the net income; after her death, with the exception of \$30,000 a year for the daughter during her lifetime and a few minor charges, the entire income goes to the university. One-half of the income will be set aside every year and added to the principal until the value of the fund shall reach \$20,000,000. After that time one-quarter of the income will be added in like manner until the sum shall be \$30,000,000, at which point the accumulation is to cease unless the legislature shall otherwise direct.

Provision is made for the erection of a university theater, to be known as "The Vilas Theater," at a cost of not less than \$250,000. This is intended as a meeting place for the student body and will be equipped with lecture halls, reading rooms, and other conveniences. Numerous scholarships, fellowships, and professorships are provided for, and others are to be added from time to time as the increase in the income permits. Important among these provisions is that for the establishment of ten professorships "to promote the advancement of knowledge rather than to give instruction." It is provided that not more than three hours in one week nor more than one hour in one day shall be exacted of these professors for the purpose of teaching or lecturing. They shall be given large opportunities to do original research work for the advancement of learning in any branch of human knowledge to which the regents may assign them.

The provisions of the Vilas will were accepted by the legislature of Wisconsin in 1909.

REQUIREMENTS FOR ENTRANCE TO MEDICAL DEPARTMENT OF WESTERN RESERVE UNIVERSITY.

On recommendation of the faculty of the medical department of Western Reserve University, the trustees have voted that beginning with the academic year 1910-11 the requirement for unconditional entrance to the medical department shall be graduation from an approved college or scientific school granting the bachelor's degree (or equivalent) following the completion of a course of at least three collegiate years and including inorganic chemistry, physics, biology, and Latin. Conditional entrance will be granted upon the completion of the work of the junior year in the course of an approved college or scientific school enforcing a four-year course (or equivalent degree), including the subject requirements enumerated above, conditioned upon the student obtaining a baccalaureate degree before he enters the third year in the medical school. (Science, Feb. 5, 1909.)

TWENTIETH ANNIVERSARY OF CLARK UNIVERSITY.

In September, 1909, came to its close at Worcester, Mass., the three weeks' celebration of the twentieth anniversary of Clark University. No martial pomp or splendor marked the occasion, but its proceedings will make the event well known in scientific and educational circles. It was a gathering mainly of professors and scientists of America and Europe, who delivered addresses and then discussed them in conference—a method of celebration pronounced unique and admirable. Prof. E. H. Moore, of Chicago, lectured on "Postulational methods in mathematics," followed by Professor Pierpont and Professor Van Vleck. In physics, Prof. Albert Abraham Michelson, of Chicago, and Prof. Ernest Rutherford, of Manchester, England, represented winners of Nobel prizes. Prof. Vito Volterra, of Rome, Italy, lectured on "The theory of electric and luminous waves on elasticity, and on the mechanics of 'heredity.'" In psychology, Sigmund Freud, of Vienna, and Dr. C. G. Jung, specialist in psychiatry in the University of Zurich, were prominent. Dr. Leo Burgerstein, of the University of Vienna, a leading authority on school hygiene, gave an interesting lecture on coeducation and hygiene, emphasizing the importance of differentiating secondary education of boys and girls when taught together, and expressed the belief that coeducation is extending in the countries of central Europe. There were other lectures by distinguished scholars of America and Europe. Honorary degrees were conferred upon 21 persons.

STATE REPRESENTATION ON THE BOARD OF TRUSTEES, CORNELL UNIVERSITY.

An act of the New York State legislature of 1909 provides for the appointment of five trustees of Cornell University by the governor of the State. As the law now stands the composition of the board of trustees is as follows: The governor, lieutenant-governor, speaker of the house of assembly, commissioner of education, president of the State Agricultural Society, commissioner of agriculture, librarian of the Cornell library, and president of Cornell University, *ex officio*; the eldest lineal male descendant of Ezra Cornell for life; 5 appointed by the governor; 15 elected by the board of trustees; 10 by the alumni of the University; and 1 each year by the executive committee of the New York State Grange.

THE UNIVERSITY OF VIRGINIA SUMMER SCHOOL.

[From the official report.]

The last session of the University of Virginia Summer School appeared one of the most successful ever assembled in Virginia. There were in attendance 1,144 students who paid for courses, to say nothing of the numerous visitors. Of the students present, 218 were from 24 States other than Virginia. Of this

large number of students only 180 had no teaching experience. There were 301 college graduates and 193 high-school graduates in the student body.

The distinct contribution which the University of Virginia Summer School has made during the last three years toward the improvement in the number and efficiency of well-trained teachers has been through its courses leading toward the professional certificate. This is the only summer school in Virginia which the state department of education allows to offer credits toward professional certificates. Teachers may take certain advanced courses during two or more summer sessions of six weeks each, and if they pass the examinations after doing creditable daily recitation work, they may procure this coveted certificate. There were 294 teachers taking the courses counting toward this certificate.

It is to be noted that the students took what they needed without regard to the difficulty of the courses. For example, there were 325 taking mathematics; 120 taking Latin, some of which was advanced Latin; 118 taking agriculture; while the various courses in education contained 352 students. English, in which most persons are more or less deficient, numbered 433 students, while drawing, which is a comparatively new subject in Virginia, numbered 445. Manual training, which three years ago had only 12 students, enrolled 147. Physics, chemistry, zoology, and botany, which were given with great thoroughness by men distinguished in their line, enrolled 119 students.

Several conferences were held during the session. The first of these was the state high-school conference, which has an important work to do in the continuous development of the newly established high schools of the State. This conference was largely attended by public and private high-school men and college professors of the State. The discussions were exceedingly valuable.

Quite the most interesting conference, and perhaps the most valuable, was the rural-life conference. These gatherings were held in the afternoon on the lawn and in Cabell Hall at night. Speakers, well known and practical, were assembled from various parts of the country to discuss such topics as good roads, forestry, school and home sanitation, how to reduce the death rate among farm children, improved methods of agriculture, adulteration of foods, improved methods of cooking, and similar problems. These addresses proved so valuable that it was thought wise to publish them in pamphlet form. Two thousand copies were printed and distributed among the teachers and other citizens. Five hundred copies were placed at the disposal of the State Farmers' Institute, which met in Cabell Hall immediately after the close of the summer school. It is believed that this is one of the ways by which the university has rendered some direct service to the State.

The pleasure of the students was not entirely overlooked. Various plans were wrought out, but one of the most interesting was the picturesque historical pageant commemorating the Fourth of July. Each county and State endeavored to represent its most distinguished historical personages. There were 1,000 in costume, and the line of march was fully one-fourth of a mile long.

ALUMNI REPRESENTATION ON BOARD OF TRUSTEES.

On December 7, 1908, the board of trustees of Columbia University, in the city of New York, took action providing that after January 1, 1909, six places on the board may be filled upon the nomination of the alumni. The nomination shall be made by a nominating committee of the alumni, which shall be composed of representatives

of alumni associations registered with and accepted by the trustees. Every association is entitled to cast as many votes by its representative or representatives as it has graduate members whose dues for the current year have been paid. The resolution adopted by the trustees provides that the election of an alumni trustee shall not take effect until he shall have filed an irrevocable letter of resignation as alumni trustee, to take effect at the end of six years from the date of his election.

EVENING COURSES OF THE WESTERN RESERVE UNIVERSITY.

The Western Reserve University inaugurated in February, 1908, a system of evening courses. Classes meet twice weekly for one and one-half hour periods. The courses are open to any man or woman not regularly registered in any other department of the university, as follows:

1. A graduate of an approved high school, or any person who shall have completed such courses of study as are necessary for admission to Adelbert College or the College for Women, may secure for work done in these evening courses due credit toward a bachelor's degree.
2. A person by maturity and preparation rendered capable of pursuing these courses with profit may do so without credit toward a degree.
3. A person holding a baccalaureate degree may receive for these evening courses credit toward a master's degree.

Since the organization of this system of instruction courses have been given in the following departments of study: Economics, French, German, history, biology, English, philosophy, political science, mathematics, biblical literature, and sociology.

An act of the legislature of Utah, approved March 22, 1909, provides that the government and control of the Agricultural College of Utah shall be vested in a board of nine trustees to be appointed by the governor for terms of four years. Of the members first appointed four shall serve for two years and five for four years.

Prof. John W. Burgess, dean of the faculty of political science of Columbia University, has been appointed also dean of the faculties of philosophy and pure science, thus uniting the three nonprofessional graduate faculties under one administrative head. This arrangement will result undoubtedly in simplification and economy of administration and saving of time to students.

Johns Hopkins University, Baltimore, Md., from its organization to the present time, has conferred only the bachelor of arts and doctor of philosophy degrees for work done outside of the medical department. The board of trustees have now decided to confer the degree of master of arts to meet the wishes of those graduate students of the university who can not spend the necessary time for completing

the work for the degree of doctor of philosophy. According to the rules adopted, the candidates must have obtained the baccalaureate degree from a college of good standing, and must then have followed courses of university study under proper guidance for at least two years. The academic year immediately preceding the final examinations must be passed in Johns Hopkins University, unless special permission to the contrary is granted for some extraordinary reason.

The trustees of Lawrence University, Appleton, Wis., decided on December 2, 1908, to change the name of the institution to Lawrence College, to drop at the close of the scholastic year 1908-9 the preparatory department and the school of commerce, and to concentrate their efforts upon the college of liberal arts.

The charter of Swarthmore College, Swarthmore, Pa., has been amended by removing the requirement that the officers and members of the board of managers should be members of the religious Society of Friends. (Swarthmore Bulletin, Vol. VI, No. 3.)

The University of Idaho will open a law school in September, 1909. The course of study will extend through three years.

The University of Michigan has established the degree of doctor of law for students in the law department who have already received the bachelor of arts degree. (Michigan Alumnus, March, 1909, p. 224.)

In order to assist the cities of Wisconsin in framing their ordinances by giving them the advantage of information regarding the best municipal legislation throughout the world, the extension division of the University of Wisconsin has just established a new department to be known as the "bureau of municipal reference." This new department will undertake to do for the city councils of the State what the legislative reference department at the capitol has been doing for the state legislature.

IV. STANDARDIZATION OF EDUCATION.^a

ACTION OF THE SECRETARY OF AGRICULTURE REGARDING VETERINARY COLLEGES.

The United States Department of Agriculture employs over 800 veterinarians. In order that it might be informed as to the

^a The action taken by the National Association of State Universities in the matter of standardization is given on p. 88. See also the qualifications which institutions must possess to entitle their graduates to be admitted to the Association of Collegiate Alumnae (p. 59); also the position taken by the Carnegie Foundation regarding George Washington University (p. 38); also the address of President Pritchett (p. 138); also by-laws adopted by the Association of Colleges and Preparatory Schools of the Southern States (p. 58).

veterinary colleges whose graduates may be deemed qualified for the positions they are expected to fill in the department, the Secretary of Agriculture appointed a committee on veterinary education composed of Dr. Richard P. Lyman, secretary of the American Veterinary Medical Association; Dr. Joseph Hughes, president of the Chicago Veterinary College; Dr. Tait Butler, secretary of the Association of Veterinary Faculties and Examining Boards of North America; Dr. Paul Fischer, state veterinarian of Ohio, and Dr. A. M. Farrington, Assistant Chief of the Bureau of Animal Industry, to visit the veterinary colleges throughout the United States in order to gain definite information regarding their equipment and facilities for teaching, and also to indicate to the department the necessary matriculation examination and course of instruction to qualify graduates for admission to the civil-service examination. The committee submitted a report, which was approved by the Secretary of Agriculture on June 8, 1908. On August 9, 1909, the following regulations, based on the committee's report, were issued by the Bureau of Animal Industry of the Department of Agriculture (Circular 150):

REGULATIONS GOVERNING ENTRANCE TO THE VETERINARY INSPECTOR
EXAMINATION.

Effective on and after September 1, 1909.

By and with the consent and approval of the United States Civil Service Commission, the following regulations are hereby promulgated with reference to the matriculation examination and course of instruction in veterinary science at veterinary schools and colleges required to educate and qualify persons for the civil-service examination for the position of veterinary inspector in the United States Department of Agriculture, Bureau of Animal Industry. These regulations also include a list of the schools and colleges at present accredited and qualified to supply the graduates eligible to enter the above-mentioned civil-service examination.

It is distinctly to be understood that no power to direct or control the work of the veterinary schools or colleges is claimed by the Civil Service Commission or by the Department of Agriculture. The regulations which follow merely indicate what are the requirements of the Government as to veterinary schools and colleges whose graduates are admitted to examination for veterinary inspectors in the Bureau of Animal Industry.

REGULATION I.—MATRICULATION.

1. A matriculation examination shall be adopted by each veterinary college, the minimum requirements of which shall be equivalent to the second-grade examination as published in the United States Civil Service Manual of Examinations, supplemented by United States history and geography of the United States and its possessions. Such examination will therefore comprise: 1. Spelling. 2. Arithmetic. 3. Letter writing. 4. Penmanship. 5. Copying from plain copy. 6. United States history. 7. Geography of the United States and its possessions.

2. An applicant having a diploma from a recognized college or a normal or high school shall be eligible for admission to a veterinary college without examination.

REGULATION II.—DATES OF HOLDING MATRICULATION EXAMINATIONS.

The entrance examination shall be conducted on one or more specifically advertised dates under the supervision of the dean, director, or, in the case of state institutions, by the official examining board. The last entrance examination shall be held not later than fifteen days subsequent to the advertised annual opening of the college year, and no time credit shall be allowed to students admitted after that date.

REGULATION III.—FILING OF MATRICULATION EXAMINATION PAPERS.

The questions and answers of both successful and unsuccessful applicants shall be kept on file by the institution for at least five years subsequent to the examination of the applicants.

REGULATION IV.—GRADING OF MATRICULATION EXAMINATION PAPERS.

Applicants shall be graded upon a basis of 100 per cent, and a grade of not less than 70 per cent shall qualify for admission.

REGULATION V.—CERTIFICATE OF MATRICULATION EXAMINATION.

Any person applying for admittance to the freshman class or for advanced standing in a veterinary college shall present before being enrolled a certificate showing that he has passed the matriculation examination required by these regulations, and in no case shall he be admitted without such certificate.

REGULATION VI.—SUBJECTS CONSTITUTING COURSE OF INSTRUCTION.

The appended list of subjects shall constitute the course of instruction required as a minimum for veterinary colleges. These numerically indicated shall be known as the major subjects, and those designated by letters shall be under the direction of the professors in charge of the allied major subjects.

1. Anatomy:
 - (a) Histology (veterinary).
 - (b) Zoology (veterinary).
 - (c) Embryology.
2. Physiology:
 - (a) Principles of nutrition.
 - (b) Hygiene.
 - (c) Animal locomotion.
3. Zootechnics:
 - (a) Breeds and breeding.
 - (b) Judging.
 - (c) Feeds and feeding.
 - (d) Dairy inspection.
 - (e) Jurisprudence.
4. Chemistry:
 - (a) Elementary physics.
 - (b) Physiological chemistry—analysis of milk, urine, etc.
5. Materia medica:
 - (a) Botany (medical).
 - (b) Pharmacy.
 - (c) Toxicology.
6. Pathology:
 - (a) Bacteriology.
 - (b) Parasitology.
 - (c) Post-mortem examination.
 - (d) Meat inspection.
 - (e) Laboratory diagnosis.
7. Practice of comparative medicine:
 - (a) Diagnostic methods and clinics.
 - (b) Therapeutics.
 - (c) Control of infective diseases.

8. Surgery:

- (a) Surgical diagnosis and clinics.
- (b) Surgical restraint.
- (c) Soundness.
- (d) Lameness.
- (e) Shoeing and balancing.
- (f) Dentistry.
- (g) Obstetrics.

REGULATION VII.—LENGTH OF COURSE.

The course of instruction when given during the day shall cover a period of three years of not less than six and one-half months in each year, exclusive of final examinations and holidays; and this course of instruction shall have as a minimum one hundred and fifty days of actual teaching in each year and a minimum of 3,000 actual teaching hours for the entire three years. The course of instruction when given at night (after 6 p. m) shall cover a period of three years of not less than eight and one-half months in each year, exclusive of final examinations and holidays. Such course of night instruction shall have as a minimum two hundred days of actual teaching in each year, and a minimum of three thousand actual teaching hours for the entire three years, including at least one hundred and fifty hours of practical clinical instruction, which shall be given in the daytime.

REGULATION VIII.—MINIMUM NUMBER OF HOURS IN COURSE.

[The details for each subject, which here follow, are omitted, and only the recapitulation given.]

Total hours for anatomy group-----	710
Total hours for physiology group-----	125
Total hours for zootechnics group-----	110
Total hours for chemistry group-----	240
Total hours for materia medica group-----	160
Total hours for pathology group-----	420
Total hours for practice of comparative medicine group-----	675
Total hours for surgery group-----	560
Total hours, three-year course-----	3, 000

REGULATION IX.—TRANSFER OF TIME FROM ONE SUBJECT TO ANOTHER OF SAME GROUP.

An elasticity may be allowed in the apportionment of the time to the different subjects (or their divisions) under each group to the extent that not more than 25 per cent may be omitted from the time of any one subject, providing this deducted time be added to some other subject or subjects in the same group.

REGULATION X.—GRADING OF COURSE.

The course shall be graded in such manner as to avoid unnecessary repetition of lectures or instruction to the same student. For example, a student, while freshman, should be required to complete a definitely outlined course in such subjects as anatomy, histology, chemistry, etc. When advanced to the junior class he should either drop the studies of his freshman year and take up new work, or he may continue the same subject, for example, anatomy, along advanced lines of instruction.

REGULATION XI.—NUMBER OF VETERINARIANS.

On the faculty of every veterinary college there shall be at least five graduate veterinarians from accredited veterinary colleges teaching major subjects, each

of whom shall have had not less than one year's additional training in some accredited veterinary college or three years' experience in teaching or in practicing veterinary science subsequent to graduation from an accredited veterinary college.

REGULATION XII.—QUALIFICATIONS OF TEACHING VETERINARIANS.

Not more than three of the five veterinarians in charge of major subjects on each college faculty shall be graduates of any one veterinary college, unless they have had at least one year's additional training in another accredited veterinary college.

REGULATION XIII.—SUBJECTS TAUGHT BY VETERINARIANS.

The five veterinarians on the faculty of each veterinary college shall have charge of the following major subjects: (1) Anatomy, (2) practice of comparative medicine, (3) surgery, and any two of the following three subjects: Pathology, materia medica, and physiology.

REGULATION XIV.—EVIDENCE OF ATTENDANCE.

At the end of the college year each student is entitled to and shall receive a written statement giving the length of time spent in each study during the session and the grade received therein. This statement, or definite evidence of credit, shall be exacted from a student before he is given advanced standing in any veterinary college.

REGULATION XV.—TRANSFER OF STUDENTS.

A student transferring from one accredited veterinary college to another accredited veterinary college shall be given credit only for such time and courses (lectures and laboratory) as he has successfully completed in the institution previously attended. No one of the colleges herein enumerated shall give credit to any student for any work done at colleges not included in this list.

REGULATION XVI.—APPLICANTS FROM COLLEGES NOT VETERINARY.

1. An applicant who has successfully completed at least two years' work in a reputable college of human medicine, dentistry, pharmacy, or agriculture, and who brings an official and explicit certificate describing his course of study and scholarship, and also a certificate of honorable dismissal, shall not be admitted to advanced classes or standing in a veterinary college except as otherwise provided in section 2 of this regulation, but may be given credit for such subjects as have been successfully completed in such colleges if, in the subjects for which credit is sought, said colleges maintain a standard of instruction similar and equal to the minimum standard of requirements established by these regulations.

2. An applicant from a state agricultural college having upon its faculty one or more graduate veterinarians giving a special course in veterinary science may be given a time credit of one year, providing he has a certificate from the college authorities that he has successfully completed at least 1,200 hours in studies as follows: Anatomy, 500; histology, 140; embryology, 30; zoology, 40; physiology, 125; zootechnics, 100; chemistry, 230; botany, 35. Total hours pre-veterinary course, 1,200.

REGULATION XVII.—AGRICULTURAL AND MEDICAL COLLEGE GRADUATES.

1. A graduate of the regular four-year agricultural course in an agricultural college having upon its faculty a qualified veterinarian giving a regular course

of instruction in veterinary science may be given a time credit of one year, but this credit shall apply only to such subjects as he has successfully completed, provided the course of instruction in said agricultural college in the subjects for which credit is sought is similar and equal to the minimum standard of requirements in the course indicated in these regulations.

2. A graduate of a reputable college of human medicine on presentation of a diploma from such college may be given a time credit of one year, but this credit shall apply only to such subjects as he has successfully passed, provided the course of instruction in said medical college in the subjects for which credit is sought is similar and equal to the minimum standard of requirements in the course indicated in these regulations.

REGULATION XVIII.—ONE GRADUATION PERIOD ONLY.

No veterinary college shall have more than one graduation period yearly, nor shall diplomas be issued except at the close of the regular college year.

REGULATION XIX.—REQUIREMENTS FOR GRADUATION.

1. A candidate for graduation shall have attained the age of 21 years and attended three full college years in a veterinary college herein recognized (except as otherwise provided in Regulations XVI and XVII); the last year of attendance must have been at the college to which he applies for graduation.

2. He must have successfully completed the course of study and passed all the final examinations in the subjects indicated in these regulations.

3. If he fails to pass satisfactorily in subjects representing in time 25 per cent or more of his senior year, these subjects must again be taken in full with a succeeding class before he can be graduated.

REGULATION XX.—INFORMATION FOR DEPARTMENT OF AGRICULTURE.

1. All veterinary colleges shall promptly furnish to the Department of Agriculture a copy of their annual announcements and of all other publications relative to the courses of instruction offered.

2. They shall also furnish: (1) Not later than twenty days after the opening of the first session of each college year, a complete list of their matriculates by classes; and (2) within ten days after the close of the college year, a complete list of the last graduating class.

REGULATION XXI.—ELIGIBILITY FOR UNITED STATES CIVIL-SERVICE EXAMINATION.

Graduates of the accredited veterinary colleges herein listed shall be eligible at all times for the United States civil-service examination for employment as veterinary inspectors in the Bureau of Animal Industry, subject to the other requirements of the civil-service rules as to fitness, etc.

REGULATION XXII.—NOT ELIGIBLE TO CIVIL SERVICE.

Hereafter no undergraduate or other person who has not received a diploma from an accredited veterinary college shall be permitted to take the civil-service examination for the position of veterinary inspector.

REGULATION XXIII.—SUPERVISION OF VETERINARY COLLEGES.

The Department of Agriculture shall maintain such supervision of the work of the veterinary colleges as shall enable it to secure the requisite information to determine whether such colleges are faithfully complying with the minimum standard of requirements indicated in these regulations.

REGULATION XXIV.—LIST OF ACCREDITED VETERINARY COLLEGES.

The following list of institutions is approved in lieu of the one previously in force. There will be added thereto, as occasion may arise, upon recommendation of the Department of Agriculture or upon proof made to the Civil Service Commission that any school or college has qualified as provided in these regulations for eligibility, any other veterinary schools or colleges whose courses of study are found to be satisfactory to the department or to the commission according to the standards herein established.^a

Chicago Veterinary College.

Cincinnati Veterinary College.

Colorado State College of Agriculture and the Mechanic Arts, Veterinary Department.

Indiana Veterinary College.

Iowa State College, Veterinary Department.

Kansas City Veterinary College.

Kansas State Agricultural College, Veterinary Department.

McKillop Veterinary College.

New York-American Veterinary College.

New York State Veterinary College.

Ohio State University, College of Veterinary Medicine.

San Francisco Veterinary College.

State College of Washington, Veterinary Department.

United States College of Veterinary Surgeons.

University of Pennsylvania, Veterinary Department.

The Grand Rapids Veterinary College is excluded until it complies with these regulations, except as follows: Those graduates who have studied veterinary science at this college for three years may be admitted to examinations.

The Ontario Veterinary College is excluded until it complies with these regulations, except as follows: Those graduated during or prior to 1897 may be admitted to examinations.

Graduates of the following-named colleges, which are not now in session, will be admitted to examinations:

Columbian University, Veterinary School, Washington, D. C.

Harvard University, School of Veterinary Medicine, Boston, Mass.

McGill University, Veterinary Department, Montreal, Canada.

National Veterinary College, Washington, D. C.

Graduates of the following-named foreign colleges will be admitted to examinations:

Glasgow Veterinary College, Glasgow, Scotland.

Royal Veterinary College, London, England.

Royal Veterinary College of Ireland, Dublin, Ireland.

Royal (Dick) Veterinary College, Edinburgh, Scotland.

The New Veterinary College, Liverpool, England.

Veterinary College of Lemburg, Austria.

Approved.

JAMES WILSON,
Secretary of Agriculture.

Approved (by direction of the Civil Service Commission).

JOHN C. BLACK,
President.

WASHINGTON, D. C., July 31, 1909.

^a The colleges are arranged in alphabetical order.

V. AID TO STUDENTS.

INDUSTRIAL FELLOWSHIPS—UNIVERSITY OF KANSAS.

The University of Kansas has inaugurated a system of industrial fellowships for the promotion of learning along scientific industrial lines. The work is under the direction of Robert Kennedy Duncan, professor of industrial chemistry, and is supported financially by private donors, usually some manufacturing establishment interested in the development of a particular process. An agreement is entered into by the university, the donor, and the fellow, by which the fellow is to spend two years in investigation of the subject chosen and is to receive, in addition to the amount of the fellowship, a part of the profits or proceeds derived as a result of his research.

The first ten fellowships, as described by Professor Duncan, were as follows:

1. An investigation into the chemistry of laundering, having for its object an improvement which will save in some measure laundered fabrics. It yields \$500 a year, together with 10 per cent of the net profits.

2. A search for a new diastase. The present source of the best diastase is expensive. The investigation has as a matter of fact developed into an attempt to make a new fodder upon scientific principles. It yields \$500 a year and, under the original agreement, 10 per cent of the gross proceeds for three years.

3. An attempt to utilize the constituents of waste buttermilk, which, at present, in butter factories goes down the drains. These constituents, which it is desirable to conserve, are primarily casein, and secondarily, lactic acid and sugar of milk. The fellowship yields \$500 a year and 10 per cent of the net profits.

4. An investigation into the chemistry of baking. This investigation was established by the National Association of Master Bakers with the object not only of improving the chemistry of bread, but, as well, of providing for the association a trained expert upon whom they could afterwards rely. It yields \$500 a year, together with a lump sum to be settled by arbitration, if necessary.

5. An investigation into the constituents of crude petroleum. The fellowship yields \$1,000 a year and 10 per cent of the net profits.

6. An attempt to improve the enamel upon the enamel-lined steel tanks used in all kinds of chemical operations on a large scale. This fellowship was established by the largest manufacturer of these tanks in the world. It yields \$1,300 a year, together with an additional consideration to be decided upon, for the service rendered, by the chancellor of the university or one whom he may appoint.

7. An investigation into the relation between the optical properties of glass and its chemical constitution. This fellowship yields \$1,500 a year and 10 per cent of the net profits.

8. The discovery of new utilities for Portland cement and of improvements in its manufacture. This fellowship yields \$1,500 a year and a large additional consideration dependent upon success.

9. An investigation into certain glands of deep-sea mammals. It yields \$1,500 a year and an additional consideration to be decided upon by arbitration. This fellowship is to be a benefaction.

10. The discovery of new utilities for ozone. It yields \$2,000 a year and 10 per cent of the net profits.

PRINCETON BUREAU OF STUDENT SELF-HELP AND COOPERATIVE STORE.

The bureau of student self-help at Princeton University, which is conducted under the auspices of the college Young Men's Christian Association, is rendering excellent service in the interest of undergraduates who are working their way through college. This bureau keeps a classified list of opportunities for employment, and a list of students wishing to work. Through these lists the applicant for work is assigned to the job he is capable of handling, and the bureau guarantees that the work will be done satisfactorily. Expert service in stenography and typewriting is one of its specialties, and in addition men are furnished for all sorts of general work, such as tending furnaces, mowing lawns, raking leaves, addressing envelopes, caring for tennis courts, distributing advertisements, etc. No charge is made by the bureau, its object being purely philanthropic. In every class there are several men who pay all their college expenses by their own exertions, and about one-third of all the students earn the money to pay part of their expenses.

Another student organization which reduces expenses for the undergraduates is the university store, the Princeton coöp. This institution, which since its establishment a few years ago has prospered until now it occupies several rooms in West College, furnishes supplies to students at reduced rates, on the payment of a nominal membership fee to meet its expenses. A graduate manager is in charge, and members of the faculty and alumni have a general oversight of the store. (Boston Transcript, Nov. 14, 1908.)

Bryn Mawr College has established ten graduate scholarships, five open to English, Irish, or Scotch, and five to German women students, who have attained a standard equivalent to that of the bachelor's degree. The scholarship covers the fees for board, residence, and tuition at Bryn Mawr College for one academic year, and as these fees for graduate students amount to \$405 this is equivalent to a scholarship of £81 or of 1,620 marks. (Science, Feb. 5, 1909.)

Two fellowships of an annual value of \$400 each, and two graduate scholarships of \$225 each were established in the College of Agriculture of the University of Wisconsin at the recent meeting of the regents. These fellowships and scholarships are open to graduates of colleges of recognized standing or other students whose education is equivalent to that represented by a college degree. Both men and women are eligible.

The Pennsylvania Academy of the Fine Arts announces the award by its board of directors of the academy's gold medal of honor, the highest award which it is in the power of the institution to bestow upon an artist, to Thomas P. Anshutz. This medal is awarded in the discretion of the board of directors of the academy in recognition of high achievement, or for eminent services in the cause of art or to the academy.

The committee in charge of the Sarah Berliner research fellowship for women will offer every two years a fellowship of the value of \$1,200, available for study and research in physics, chemistry, or biology, in either America or Europe. Applicants must hold degrees of doctor of philosophy or be similarly equipped for the work. Chairman of committee, Mrs. Christine Lad Franklin, Johns Hopkins University.

VI. CHANGES IN PERSONNEL OF OFFICIALS.

President J. B. Angell, of the University of Michigan, resigned February 17, 1909, to take effect at the close of the university year; Harry B. Hutchins, dean of the law school of the university, has been chosen acting president for one year.

The board of regents passed a resolution expressing their desire to record at that time and in some measure their appreciation of the services of President Angell to the institution of which he had so long been the head, and whose "advance in effectiveness of educational work and in all that goes to make a university great," had been no less prominently marked than the growth in its student attendance (from about 1,200 to more than 5,000). The resolution closes as follows:

Proud as he may justly be of the homage which the world justly yields him as educator, diplomat, and publicist, he has even greater cause for pride in the grateful affection of the people of this State, whom he has served so long and so abundantly, and in the love of the army of students, whose lives he has directly enriched and to whom he will always stand for all that is highest and best in scholarly attainments, in private character, and in public and private citizenship.

President Charles W. Eliot, of Harvard University, on October 10, 1908, tendered to the corporation his resignation, to take effect not later than May 19, 1909, on which date he would complete forty years of service as president. The resignation was regretfully accepted by the corporation on October 26, 1908, and by the overseers on November 4, 1908, to take effect May 19, 1909. On January 13, 1909, the corporation elected Abbott Lawrence Lowell, LL. D., pro-

fessor of the science of government, as president of the university. On June 28 Doctor Eliot was elected by the corporation president emeritus of the institution. This is stated to be the first honor of the kind in the history of the university, and one of the few such complimentary actions taken by higher institutions in this country.

The new president, Doctor Lowell, is a Harvard man, having been graduated with the class of 1877, and having finished his training at the Harvard Law School. From 1880 until 1897 he was engaged in the active practice of law. During this period he found time to make extended studies in comparative government, the result of which was his work on governments and parties in continental Europe, published in 1897. From 1897 to 1899 he held the position of lecturer on government at Harvard. In 1900 the (Dorman B.) Eaton professorship of the science of government was founded at Harvard, and Doctor Lowell occupied this chair until the time of his election as president of the university.

Dr. Richard Cockburn Maclaurin was inaugurated president of the Massachusetts Institute of Technology June 7, 1909. Dr. Ernest Fox Nichols has been elected to succeed Doctor Tucker as president at Dartmouth, and will enter upon his duties at the beginning of the fall term, 1909. It is noteworthy that both men were called from the department of physics in Columbia University, and both have attained considerable distinction in abstract science.

Mrs. Ella Flagg Young, since 1905 principal of the Chicago Normal School, was chosen in July, 1909, to be superintendent of the Chicago public schools. She will be the first woman to occupy this position, having been elected in competition with a number of candidates who had been urged for the position since the resignation of Superintendent Edwin G. Cooley. Mrs. Young has been engaged in teaching since 1862. She was district superintendent of schools for Chicago from 1887 to 1899 and professor of education at the University of Chicago from 1899 to 1905. The Chicago school board has created a new position in the schools, that of assistant to the superintendent. John D. Shoop, supervisor of vacation schools, was chosen to fill it.

Other changes are the following:

Samuel Avery was elected chancellor of the University of Nebraska to succeed E. B. Andrews, whose resignation took effect January 1, 1909. Dr. Francis Brown was inaugurated as president of Union Theological Seminary, New York City, November 17, 1908. Rev. Marion Leroy Burton, Ph. D., has been elected president of Smith College, Northampton, Mass., in place of Rev. L. Clark Seelye, resigned. Donald J. Cowling, of Baker University, Baldwin, Kans., has been elected president of Carleton College, Northfield, Minn. Thomas F. Crane, dean of the faculty of Cornell University, retired at the end of the year 1908 on a Carnegie pension. Rev. William

Horace Day has succeeded Rev. George A. Gates as president of Pomona College, Claremont, Cal. Harry A. Garfield was inaugurated president of Williams College October 7, 1908. Dr. J. P. Gordy, of New York University, died December 31, 1908. James E. Harlan, LL. D., has succeeded William F. King as president of Cornell College, Mount Vernon, Iowa. A. Ross Hill was inaugurated president of the University of Missouri December 10, 1908. George Washington Hough, professor of astronomy, Northwestern University, died January 1, 1909. Dr. R. C. Hughes, president of Ripon College, has resigned. Miss Agnes Irwin, dean of Radcliffe College since 1894, has resigned to take effect September 1, 1909. Frank L. McVey, Ph. D., has been elected president of the University of North Dakota. S. C. Mitchell has been elected president of the University of South Carolina. Prof. F. B. Mumford has been elected dean of the agricultural college in the University of Missouri, in succession to Dean J. H. Waters, who becomes president of the Kansas Agricultural College. Dr. A. A. Murphree has been elected president of the University of Florida. Dr. Theodore B. Noss, principal of the state normal school, California, Pa., died February 28, 1909. President Cyrus Northrop, of the University of Minnesota, resigned December 8, 1908, the resignation to take effect July 1, 1909. John W. Olsen, formerly state superintendent of public instruction of Minnesota, has been elected dean and director of the agricultural college of the University of Minnesota. Rev. Charles A. Richmond has been elected president of Union College, Schenectady, N. Y. Dr. William Henry Ruffner, founder of the public-school system of Virginia and the first superintendent of public instruction of that State, died November 24, 1908. Rev. Frank K. Sanders was inaugurated president of Washburn College, Topeka, Kans., February 5-6, 1909. Rev. Thomas J. Shahan has been elected rector of the Catholic University of America. Vice-Chancellor B. L. Wiggins, of the University of the South, died June 14, 1909. President Carroll D. Wright, of Clark College, died in February, 1909. Prof. John H. Wright, professor of Greek at Harvard and dean of the graduate school, died in November, 1908.

VII. PUBLIC SCHOOLS.

REPORT OF THE SUPERVISOR OF ELEMENTARY RURAL SCHOOLS IN VIRGINIA.

A work has been inaugurated by the trustees of the Peabody fund among the elementary rural schools of Virginia, which is described in the following extracts from the first report made by Mr. James S.

Thomas, supervisor of rural schools of Virginia, to Mr. Wickliffe Rose, general agent of the fund, and dated June 30, 1909. Mr. Rose, in forwarding a copy of this report to the bureau, states that it is necessarily tentative.

From the Report of the Supervisor.

* * * In accordance with the understanding reached as to the beginnings of this work, it was deemed wise to make choice of a few typical counties and concentrate on them in shaping a definite ideal or plan for the guidance of local school authorities. Two counties have been selected for special work and eleven others for general improvement. In selecting these counties care was taken, not so much to find counties with somewhat ample funds, but to strike an average of conditions, regardless of the present state of school finances.

The first thing deemed necessary in all of these counties was to take advantage of the new law passed by the last general assembly to have the salary of the office of division (county) superintendent supplemented in order that good men might be selected for these offices. Twelve of the thirteen counties responded and raised the superintendent's salary to a point that would justify the employment of a good man for his entire time. The thirteenth was already paying an adequate salary. It is now possible to undertake work with the cooperation of competent superintendents in these counties, where previously, in some instances at least, this would not have been possible. In addition to this supplement to the superintendents' salaries in these counties, the boards of supervisors, which is our taxing body, increased the school levy in sums ranging from 5 to 20 cents on the hundred dollars on assessed values. This increase augmented the school funds in amounts ranging from a minimum of \$1,300 to a maximum of \$5,000 per year in each county, the total aggregate being \$36,000 increase. In addition to this, \$22,250 was raised by private subscription for the purpose of helping to build new and modern schoolhouses and to help carry on our special work.

Six of these counties have been organized for some industrial work. In inaugurating this movement, we have used every agency found in the county willing to help. Briefly, the plan is as follows:

Prizes are offered the children of the schools for certain products of the home and farm. These must be produced by the boys and girls. The prize lists are made up to suit the needs of each individual county. Pamphlets are prepared by experts setting forth in a thoroughly practical way just how the work is to be done to get the best results. These are distributed to the schools before the sessions close. The teachers go over them with the children two or three times each week explaining how to use them. This forms a basis for elementary agriculture and domestic science. The teachers also advise with the boys and girls about the classes of contests they are to enter. Each child then fills out an entry blank and these are forwarded to the office of the division superintendent. The work is to be done during the summer vacation and does not in any way interfere with the regular school work. This has made the movement many friends among a certain class of individuals who insist upon a close adherence to the "three R's."

In October, just before the session begins, a two days' "educational fair" will be held at the county seat. Prizes will be awarded, spelling bees conducted, oratorical contests held, and educational addresses delivered. We hope to make these the biggest days of the year. * * *

Reports to date show 2,860 boys and girls entered in the six counties. The number will be largely increased before the entry lists close. The prizes range from \$1 to \$65 and the amounts given in each county from \$160 in Augusta to \$450 in Campbell. All prize money is supplied locally. Another year will see 50 counties fully organized for this work. The State Federation of Women's Clubs is helping us, and we are in close touch with the Department of Agriculture in Washington.

Through the teachers' association of one of the counties some special work has been undertaken. Friday afternoon is set aside as a sort of "party lunch hour." Girls are asked to bring various things to eat, prepared by themselves. The boys are requested to make report on the "meat bill at home this week" or the "flour account," stating to the "Home Club" such information as they may have obtained as to where the meat was produced or from what source the flour was derived. All of the home matters will be studied in this way. We hope by this means to emphasize such facts as, for example, that an incompetent farmer raises one thing in Virginia and buys his pork from Iowa and his corn in Illinois; while an intelligent farmer in Virginia raises all that he eats or uses about the farm, and more besides. The people are responding to this rational treatment of our problem, and my future reports will reveal certain facts of progress which I am sure will be of interest to you.

The two counties which have been decided upon for special work are Halifax and Sussex. In these counties I am making a close study of the educational, economic, and social conditions. A map is just being completed which will set forth the farm and home conditions in Halifax County. Everything is recorded that has to do with the improvement, or its reverse, in rural life. Conditions of homes, schools, churches, farms, outhouses, sanitation, stock, crops—in short, a complete census of everything pertaining to the life of the people. * * *

When this map of Halifax County is completed, a similar map of Sussex County will be made. In Sussex County also a good deal of work has been done, but not a sufficient amount upon which to base a map and statistical report. * * *

It is peculiarly fitting that the work now being done by myself, through the generosity of the Peabody board, should begin just at a time when there will be in the various divisions of the State an amount of expert supervision of schools heretofore impossible. This means cooperation by the local superintendents, who are, indeed, the key to the situation in the work now being undertaken for the scientific development of our rural schools.

SCHOOL SUPERVISION.

Georgia.—A bill was passed in 1909 by the Georgia legislature providing for the popular election of county school commissioners. The examination now required by law to be taken for this office is to be held at least ninety days before the day of election, and all candidates must stand said examination, and those who fail to make 85 per cent shall, by the board of education, be declared ineligible to hold the office of county school commissioner.

Missouri.—The legislature of Missouri, at the session held in 1909, passed a law creating the office of county superintendent of public schools in each and every county of the State, who shall be elected every four years by the qualified voters of the county. The law prescribes that he shall be at least 24 years old, a citizen of the county,

shall have taught or supervised schools as his chief work during at least two of the four years next preceding his election, or shall have spent the two years next preceding his election as a regular student in a normal school, college, or university, and shall at the time of his election hold a diploma from one of the state normal schools or teachers' college of the State University, or shall hold a life state certificate authorizing him to teach in the public schools of Missouri, granted by the state superintendent of public schools as the result of an examination which shall include the subjects of school supervision and teaching in the rural schools, or shall hold a first-grade county certificate. The salary of the county superintendent ranges from \$700 in counties having less than 12,000 population to \$1,500 in counties having 50,000 population or more. The State appropriates to each county the sum of \$400 toward the salary of the superintendent.

Ohio.—An act of the legislature of Ohio, which became a law on March 25, 1909, provides for the appointment by the state commissioner of common schools of two inspectors, at an annual salary of \$2,000 each, to aid in the recognition and classification of high schools. The inspectors are appointed for terms of two years, one being appointed annually.

EDUCATIONAL CAMPAIGN IN KENTUCKY.

Hon. J. G. Crabbe, state superintendent of public instruction of Kentucky, opened a whirlwind campaign for better education in that State on November 28, 1908. The campaign covered a period of nine days and was carried on by 29 speakers, who delivered nearly 300 public addresses. The entire State was covered, and nearly 60,000 people heard the addresses. Much good to education is expected to result from the campaign, which is described in Bulletin No. 10 of the Kentucky department of education.

(See also account of the work of the conference for education in Texas, p. 62.)

PUBLIC-SCHOOL FRATERNITIES.

By an act approved March 16, 1909, the legislature of California forbids the formation and existence of secret fraternities, sororities, or clubs in the public elementary and secondary schools in California, and requires boards of education and boards of school trustees to enforce the provisions of the act by suspending, or, if necessary, expelling a pupil who refuses or neglects to obey any rules or regulations that may be made in pursuance of the provisions of the act.

The legislature of the State of Oregon, by an act (Session Laws, 1909, p. 318), declares unlawful secret societies of every kind and character, including fraternities and sororities, which may now or

hereafter exist among the pupils of any of the public schools of the State, including high schools, either local or county. It authorizes each school board to suspend or expel from school all pupils who engage in the organization or maintenance of such societies.

An act of the legislature of Vermont, approved January 7, 1909, prohibits the pupils attending any public school in the State which is wholly or partly maintained by public funds from joining or from soliciting any other pupil of said school to join any secret fraternity, club, or society, except such societies or associations as are sanctioned by the school authorities. The school authorities are empowered to suspend or dismiss any pupils violating the provisions of the act.

VIII. TRAINING OF TEACHERS.

NORTH CENTRAL COUNCIL OF STATE NORMAL SCHOOL PRESIDENTS.

The eighth annual meeting of the North Central Council of State Normal School Presidents was held at Chicago March 24-25, 1909. Each of the three sessions of the council was devoted to a particular topic, which was open for general discussion. The discussion of the topic "The present and future place of the normal school in American education" is stated by President Guy E. Maxwell to have shown—

that in most States of this section of the country the normal schools are pressing upon the legislature and the people the necessity, or at least the desirability, of developing the present normal schools into what was nominated the "complete normal school;" that is, a school preparing for all grades of teaching in public schools. This policy contemplates the enlargement of present courses of study to include four years of college work and the increase of the practice department so as to include the high-school grades.

Another topic considered was "The academic content of the course of study, answering the question, 'To what extent is the inefficiency of the public schools due to the lack of scholarship and a disciplined mind on the part of the public-school teacher?'"

Debate upon this question took the direction of "raising the academic standards of the schools with somewhat less emphasis upon so-called professional subjects."

An important paper was presented by President William W. Parsons, of the Indiana State Normal School, upon "the kinds and relative amounts of work in a standard normal school course of study, with a statement of entrance requirements, relative amounts of (1) academic, (2) theoretical or professional, and (3) practice work, assuming that the normal schools are required to meet three

demands—better trained teachers for (1) rural schools, (2) elementary graded schools, (3) high schools.”

TRAINING OF TEACHERS FOR THE RURAL SCHOOLS OF WASHINGTON.

The State Normal School at Cheney, Wash., has organized a department for the training of rural school teachers. The course of study will extend through two years for graduates of the eighth grade and through one year for those who have completed the ninth and tenth grades. In addition to advanced work in mathematics, English, history, science, and language, it will embrace a thorough review of all the common branches, work in agriculture, nature study, and that special professional training that will fit students for rural school teaching. The head of the new department will be Mr. N. D. Showalter, now county superintendent of Whitman County. (North-western Journal of Education, September, 1908.)

The general education board established a professorship of secondary education in the University of Arkansas, November, 1908.

An act of 1909 of the legislature of Kansas appropriates \$50,000 per annum for two years for the maintenance of normal training courses in public high schools. Each school designated by the state board of education is to receive \$500 per annum to be expended only in the payment of salaries. The amount that may be granted to high schools in any one county is limited to \$1,000. In case more than two schools are designated in any county, the state aid of \$1,000 will be equally divided among said schools.

An act of the legislature of Minnesota approved March 26, 1909, provides that the state normal schools shall hold a summer session of twelve weeks each under the direction of the state normal board, unless said board shall direct that a shorter session be held at any of said schools.

State Supt. E. C. Bishop, of Nebraska, has appointed Prof. E. L. Rouse of the state normal school at Peru, and Supt. E. J. Bodwell, of Beatrice, as directors of normal training in the high schools of Nebraska. These men give supervisory attention to the new work and receive actual traveling expenses only.

The board of estimate of New York City has appropriated \$500,000 as the first installment of the \$2,000,000 needed to rebuild the normal college. At a meeting of the student body held on Monday night, April 19, 1909, President George S. Davis announced that the work

of rebuilding would begin as soon as plans could be made. When finally completed, the college will be a well-equipped school for its purpose. The new chapel will stand in the center, and other buildings will be placed around it on open courts.

The State of North Dakota has granted the sum of \$60,000 for a teachers' college building.

The legislature of Oregon during its session in 1909 abolished the Central Oregon State Normal School, at Drain, and authorized the board of regents to convey the real property belonging to said school to the public-school district in which the same lies, free of charge for educational purposes. No appropriations were made for the other state normal schools.

An act of the legislature of Tennessee approved April 27, 1909, provides for the establishment and maintenance in each grand division of the State of one normal school for the education and professional training of white teachers; also, the establishment and maintenance of one agricultural and industrial normal school for the industrial education of negroes and for preparing negro teachers for the common schools. The management and control of these normal schools is vested in the state board of education.

By an act approved November 20, 1908, the legislature of Vermont provided an appropriation of \$6,000 annually for the establishment and maintenance at Middlebury College of a department of pedagogy for the education and training of high-school teachers.

An act of the legislature of Virginia approved March 14, 1908, provides for the establishment of state normal and industrial schools for women at Harrisonburg and Fredericksburg and appropriates \$75,000 for the purpose.

Closer cooperation between the University of Wisconsin and the normal schools of the State in the training of high-school teachers is the aim of the plan just adopted by the university after a conference with representatives of the normals. Hereafter graduates of the German and Latin courses in any of the normal schools will be admitted to the university with two years' credit, so that they can complete their work for the degree of bachelor of arts in two years more, making a four-year course. The adoption of this plan by the normal-school regents will make possible the full utilization of the existing institutions of the State for better academic and professional preparation of teachers. (University Bulletin, Aug. 16, 1909.)

IX. TEACHERS' TENURE, SALARIES, PENSIONS, ETC.

TENURE OF SERVICE IN NEW JERSEY.

An act of the legislature of New Jersey approved April 21, 1909, provides that—

The service of all teachers, principals, supervising principals of the public schools in any school district of this State shall be during good behavior and efficiency, after the expiration of a period of employment of three consecutive years in that district, unless a shorter period is fixed by the employing board: *Provided*, That the time any teacher, principal, or supervising principal has taught in the district in which he or she is employed at the time this act shall go into effect, shall be counted in determining such period of employment. No principal or teacher shall be dismissed or subjected to reduction of salary in said school district except for inefficiency, incapacity, conduct unbecoming a teacher, or other just cause, and after a written charge of the cause or causes has been preferred against him or her, signed by the person or persons making the same, and filed with the secretary or clerk of the board of education having charge of the school in which the service is being rendered, and after the charge shall have been examined into and found true in fact by said board of education, upon reasonable notice to the person charged, who may be represented by counsel at the hearing. Charges may be filed by any person whether a member of said school board or not.

The act reserves to any school board the right—

to reduce the number of principals or teachers employed in any school district when such reduction shall be due to a natural diminution of the number of pupils in said school district: *And provided further*, That the service of any principal or teacher may be terminated without charge or trial who is not a holder of a proper teacher's certificate in full force and effect.

The provisions of the act are not limited to any particular section or sections of the State, but apply to all the teachers, principals, and supervising principals of the public schools in the State of New Jersey. They do not, however, apply to superintendents.

TEACHERS' RETIREMENT FUNDS.

The annual report of 1908 contains the provisions for teachers' pensions made by law in Massachusetts and Virginia. During the year 1909 several acts were passed in other States dealing with annuities or establishing pension funds.

California.—The legislature amended the pension-fund act of 1905 by defining the sources of the fund's income, as follows: (1) Twelve dollars a year from each member regardless of amount of salary; (2) gifts and bequests; (3) all portions of salary forfeited on account of absence from duty.

Maryland.—The legislature recently passed a teachers' retirement act for the city of Baltimore, which authorizes the establishment of a separate pension fund independent of the state fund.

Minnesota.—An act was passed in April, 1909, granting to teachers of cities of 50,000 inhabitants and over the right to establish teachers' retirement-fund associations, which must be incorporated. It provides that the city boards of education approve of the plan of the associations. Only contributors to the fund are entitled to its benefits, but a portion of the fund may be raised by taxation, as part of the local school taxes, not exceeding one-tenth of a mill of the taxable property of the city. The term "teachers" embraces all employees of the board, except janitors. The amount of the annual contribution of the teachers to the fund is not mentioned, but is left to the board administering the fund, which can be established only if a majority of the teachers of the city have signified their willingness to join the association.

Nebraska.—An act of 1909 of the legislature of Nebraska provides that in every school district in a city of the metropolitan class there shall be created a public-school teachers' retirement fund, which shall be under the control of the board of education of such school district. The fund is to be created and maintained (1) by an assessment of not less than 1 nor more than $1\frac{1}{2}$ per cent of every installment of salary paid to a teacher regularly employed; (2) by setting aside from the general fund of the school district of an amount which shall be not less than one and one-half times the amount of salary assessments, and not less than the amount necessary to meet the payments provided for; (3) by the receipt by gift or otherwise of any real, personal, or mixed property, or any interest therein. The law provides that any teacher who has been credited under the rules and regulations of the board of education with an aggregate of thirty-five years of teaching experience may be retired, and any teacher who has been so credited with an aggregate of forty years of teaching experience shall be retired for no other cause than length of service, and shall receive from the retirement fund \$500 per annum so long as such teacher may live, provided that at least twenty years of such teaching experience shall have been in the public schools of such school district. Any teacher who has been credited with an aggregate of twenty-five or more years of teaching experience may be retired on account of disability or incapacity, physical or otherwise, and shall receive from the retirement fund, during the period of retirement, monthly installments, the annual aggregate of which shall be such percentage of the sum of \$500 as the number of years of accredited teaching experience of the beneficiary shall bear to the term of thirty-five years, provided that at least twenty years of such accredited teaching experience shall have been in the public schools of such school district.

Teachers under a tenure of permanent employment at the time of the approval of the act may, with the approval of the board of education, be exempt from its provisions.

Pennsylvania.—A retirement fund for teachers has been established in Harrisburg, which is administered by a separate board. The salient features of the scheme are: (1) All the teachers in service at the time of the establishment of the fund get full annuity when retired. (2) Teachers now in service are exempt from minimum age and minimum length of service requirement. (3) Full annuity is half salary—that is, not less than \$300, and not more than \$800. (4) All teachers contribute 2 per cent of their salaries during the first ten years of service; 3 per cent thereafter. (5) The city school board contributes annually an amount equal to the amount contributed by the teachers. (6) Teachers hereafter coming into the service of the city may retire after thirty years of service, twenty years of which must be in Harrisburg, and after they become 60 years of age. (7) Partial annuities for those hereafter coming into service are proportionate to the time taught in Harrisburg. (8) The maximum contribution per annum is \$50, no matter what the salary may be. The most striking feature of the scheme is, that if any present teacher should become incapacitated in any way, she may retire, regardless of age or length of service, on full annuity. (*Journal of Education*, Boston.)

Rhode Island.—The legislature by an act of April 29, 1909, amended the pension law of 1907 by extending its provisions to teachers who had retired before the law was passed. The amended law omits the age requirement of 60 years.

Virginia.—Concerning the law in Virginia, the following official explanation is made:

Every teacher who is pensioned will receive one-half "of the annual salary earned by such person at the time he or she was placed on such list," to be paid in quarterly installments, provided that no teacher shall receive more than \$400 annually and no principal more than \$500.

The law provides:

"1. That whenever any person, not including superintendents, has taught in the public schools of this State an aggregate of twenty years, if said person has maintained a good record and by reason of physical or mental infirmity or old age is incapable of rendering efficient service as a teacher, or if said person has taught for twenty-five years in this State, and desires to be retired, as herein provided, he or she may make application to the state board of education to be retired and pensioned as hereinafter provided. If the state board of education shall find the facts as above stated it shall place the name of the said person upon a list to be known as the 'retired teachers' list,' and the said board may, of its own motion, place any teacher on said list who has served for twenty years if said board shall deem it best for the good of the school system to take such action. A careful record shall be kept by the said board of the names of the teachers retired and pensioned under the provisions of this act, and every person so placed upon said list shall receive a pension as hereinafter provided.

"2. The fund; whence derived: In order to provide a fund to pension said retired teachers all contracts with teachers shall provide that the chairman and clerk of the school board or other officers whose duty it is to pay public school teachers shall deduct monthly from the salary of each teacher in the State a sum equal to 1 per cent of his or her salary. Each teacher shall be furnished a statement showing the amount so deducted. The sum so deducted shall be promptly remitted by the officers deducting the same through the office of the second auditor of Virginia to the state board of education, which shall immediately deposit the same with the state treasurer. All amounts so received shall be placed by the state treasurer to the credit of a fund to be called 'the retired teachers' fund,' and an accurate account shall be kept of all funds so received." (Virginia Journal of Education.)

Wisconsin.—The Milwaukee authorities determined that in place of a pension fund partly provided for by taxation, the teachers shall help themselves by paying, or having withheld from their salaries, \$2 a month for twenty-five years. No teacher is to receive an annuity unless he or she has paid into the fund \$500, and has taught twenty-five years.

District of Columbia.—The special committee of the board of education on "teachers' retirement" has prepared a bill to be presented to Congress providing for the creation of a retirement fund for the teachers of the District of Columbia. Section 1 of the bill provides for the creation of the fund from the following sources: (1) Unused balances at the close of the fiscal year on account of salaries of teachers and officers. (2) Donations, legacies, gifts, bequests, etc. (3) A sum equal to $1\frac{1}{2}$ per cent of annual appropriation for salaries of teachers and officers to be placed in the retirement fund by the Treasurer of the United States. (4) A certain per cent deducted from the teachers' salaries: (a) One per cent of all salaries of the teaching and supervising force who have taught less than ten years; (b) $1\frac{1}{2}$ per cent of the salaries of all who have taught more than ten years and less than twenty years; (c) 2 per cent of the salaries of all who have taught more than twenty years. Time is to be calculated on June 30, and salaries to be calculated in even hundreds of dollars.

Not more than \$30 is to be deducted from the salary of a principal or teacher in any one year and not more than \$40 from the salary of any supervising official.

Section 2 provides for a board of retirement, whose members shall be the president of the board of education and one member designated by him; the superintendent of schools; the colored assistant superintendent; the director of intermediate instruction; and six teachers, two representing the high schools and special subjects, two representing intermediate grades, and two representing primary grades. The six teachers are to be elected by the teachers whom they represent.

Section 3 provides that, on recommendation of the retirement board, the board of education shall have power, by a two-thirds vote, to retire any teacher or officer mentally or physically unfit for service who has

taught twenty years, ten years in the District of Columbia. It may retire any member of the teaching corps who has attained the age of 65 and has taught thirty years, ten years in the District of Columbia. The board of education is also given power, by a two-thirds vote, to retire, on his or her application, any member of the teaching staff who has been engaged in teaching thirty years, and any member of the supervising staff who has been engaged in that work or in teaching for thirty-five years, fifteen of which have been spent in the District of Columbia. (Atlantic Educational Journal.)

TEACHERS' SALARY COMMISSION FOR NEW YORK CITY.

Mayor McClellan, of New York City, in June, 1909, appointed a commission consisting of Hon. Joseph H. Choate; Mr. William C. Brown, president of the New York Central Railroad; and Prof. John C. Clark, of Columbia University, to investigate the financial needs of the teachers of New York City. Its duties will be to investigate—

first, the average rates of living of teachers, both men and women, in this city, and to ascertain, if possible, the general trend of responsibilities which they have to meet on the salary offered by this city; second, to compare, as near as possible, the salary rates in other cities with those offered in this city; third, to investigate and accurately determine what increases to the budget such recommendations as they may deem proper to submit will make.

SAN FRANCISCO TEACHERS NOT CITY, BUT SCHOOL DISTRICT EMPLOYEES.

On March 10, 1909, on the urgent recommendation of Mayor Taylor, the board of education of San Francisco passed a resolution that, beginning August 1, all teachers in the schools must live within the city, as required by the city charter.

A teacher brought suit to restrain the board from enforcing the rule.

The city attorney, in an opinion, held that teachers were not city employees, but employees of the school district, an entirely separate body politic from the city and county of San Francisco, and subject to the provisions of the general school law and not those of the city charter.

On August 10, 1909, Judge Graham, of San Francisco, ruled that the resolution of the board of education could not be enforced, and issued a restraining order, saying:

The political code of the State fixes no such residential qualification. The board can not add to the qualifications for dismissal as laid down in the State law.

Rhode Island establishes minimum salary of \$400 per annum for teachers in all public schools of the State. (Act of May 7, 1909.)

X. DEPARTMENTS AND BRANCHES OF STUDY.

BUSINESS.

NORTHWESTERN UNIVERSITY SCHOOL OF COMMERCE.

The Northwestern University School of Commerce was organized in June, 1908, sixty business men of Chicago, members of the Chicago Association of Commerce, the Illinois Society of Certified Accountants, and the Industrial Club of Chicago, assuming financial responsibility for the school during the first three years of its existence.

The cooperation of the university with active business men insures the maintenance of university standards and serves at the same time to keep the instruction in close touch with actual business life and modern commercial methods.

To accommodate the large number of men who are precluded by their employment from pursuing regular day work at a university, the school began by inaugurating, in October, 1908, an evening course leading to a diploma in commerce. This work is given five evenings a week, between the hours of 7 and 9, from October to May, inclusive. Students who are able to carry the work of four courses one evening each per week can complete the diploma course in three years.

The demand for business training of university grade among men regularly employed in business has been amply demonstrated by the success of the school during its first year. In the six courses offered, constituting together only a small part of the ultimate curriculum, there have been registered a total of 255 students.

In accordance with the plan of expansion adopted when the school was organized, the size of the faculty has been greatly increased and the amount of instruction offered during the ensuing year (1909-10) will be more than double that of the year just ended.

The establishment of a degree course in the near future is contemplated. Requirements for admission to this course will probably be essentially as follows: Applicants will be required to present at entrance at least two full years of credit in a college of recognized standing.

It is not proposed to confine the work in commerce to students in evening courses. A large proportion of the subjects which should come within the scope of a day course in commerce are now offered at Evanston, as a regular part of the curriculum in the College of Liberal Arts. The combined course in Evanston and Chicago will offer a maximum opportunity for cultural development directed to practical ends. (Announcement, 1909-10.)

HARVARD GRADUATE SCHOOL OF BUSINESS ADMINISTRATION.

Harvard University has created the degree of master in business administration, to be conferred on graduates from the graduate school of business administration.

The enrollment of students in the school at the opening of the school year was 56, of whom more than half devoted their entire time to the school as regular students. President Eliot stated in his annual report (1908) that—

the general project, though novel, has commended itself very much to both the educational and the business world; and it is apparent from the increased choosing for the current year of courses in economics that a considerable number of undergraduates are preparing to become members later of the graduate school of business administration.

CLEVELAND HIGH SCHOOL OF COMMERCE.

The board of education of Cleveland, Ohio, has established the Cleveland High School of Commerce, which will be opened for instruction in the fall of 1909. The school year is divided into four terms of twelve weeks each, with a vacation of one week between terms. Twelve quarters are necessary to complete the course of study, and a student may therefore complete the course in three years. The aim of the school is to afford efficient training for mercantile pursuits, and opportunity to specialize is given in the third and fourth years. The course of study includes instruction in English language and literature, mathematics, commercial geography, local industries, physiology, botany, physics, chemistry, history of commerce, American history, political economy, civics, municipal activities, German, French, Spanish, penmanship, business practice, bookkeeping, stenography, typewriting, accounting, transportation, business organization, auditing, freehand drawing and design, mechanical drawing, music, and physical training.

The High School of Commerce, Boston, Mass., through the public spirit of certain Boston business men, was enabled to establish traveling scholarships, and during the summer of 1908 sent two young men from the senior class on a trip of visitation and observation to the east coast of South America. This school has entered upon a system of cooperation with the business men of Boston, by which some of the students are enabled during the summer months to work in business establishments.

Tufts College, Massachusetts, has received a bequest of \$500,000 from Mr. Henry J. Braker for the purpose of establishing a school

of commerce, accounts, and finance. According to the report of the president of Tufts College for 1907-8 it is hardly probable that the school can be opened for the reception of students before September, 1910.

Dr. Benjamin M. Rastall has been appointed associate professor of business administration in the university extension division in the University of Wisconsin. Seventy-eight courses in business organization and methods are to be offered by correspondence. These include credits and collections, salesmanship, advertising, office methods, business correspondence, markets and buying, accounting, and commercial law.

CONSULAR SERVICE.

NEW COURSE AT THE UNIVERSITY OF WISCONSIN.

The present training courses preparatory to consular service given at the University of Wisconsin are to receive an important addition next semester in the form of a new course on the consular service, to be conducted by Dr. Ernst C. Meyer, formerly of the United States consular service at Chemnitz, Sonneberg, and Dresden, and recently appointed lecturer in political science at the university.

The new course is to treat of the modern consular system, and will include a comparative study of the present organization and operation, emphasis being placed on the existing rights, privileges, powers, and duties of American consuls. The larger matters of consular organization and functions which are of general interest and value will also be considered.

Doctor Meyer will give a course in municipal government which is to consist of a comparative study of the systems of city government of leading European countries and of those of the United States, with a discussion of municipal functions and current questions of municipal administration. (University Bulletin, February, 1909.)

MODERN LANGUAGES.

"COSMOPOLITAN SCHOOLS" IN CALIFORNIA.

An act of the legislature of California, approved March 18, 1909, provides that the board of education in every city of the first class shall establish and maintain in each of said cities of the first class at least one public school in which shall be taught the French, Italian, and German languages in conjunction with studies in the English language. Such schools shall be designated as "cosmopolitan schools."

ENGINEERING.

COLLEGE OF ENGINEERING OF THE NORTHWESTERN UNIVERSITY,
EVANSTON, ILL.

The trustees of Northwestern University took action in June, 1907, which resulted in the establishment of the College of Engineering. Mrs. Gustavus F. Swift, of Chicago, and her son, Edward F. Swift, gave funds for the erection of an engineering building and for its endowment. The building, an imposing structure, was completed in March, 1909, and will be known as the "Swift Hall of Engineering." The basement floor will accommodate an engine laboratory and a dynamo laboratory. On the first floor is a spacious lecture hall seating 200 persons and a laboratory for the study of hydraulics. The lecture room is lighted by indirect illumination. The second floor will be given up to a laboratory and lecture room in mechanics, a library, reading room for students and for the use of the Engineering Club, and to recitation rooms and offices. The third floor will accommodate a large drawing room, offices, class rooms, and a model room. The fourth floor comprises a drawing room, blueprint room, dark room, machine shop, and a large space for the storage of apparatus.

The College of Engineering offers two courses of study, alike in character and nearly the same in content. In the first, civil engineering subjects receive the most attention, while in the second course mechanical and electrical engineering are made prominent. The arts and science work is the same in both courses.

In the work of the College of Engineering certain features will be emphasized, as appears from the following statement from the announcement for 1909-10:

Each engineering course will extend through five years, and will require satisfactory employment during a part of each summer vacation. This extension of the time beyond the usual four-year course is made because of the large amount of liberalizing work introduced, and because five years is not too long a period for the intelligent young man to spend in preparation for the higher positions in engineering.

A liberal education is believed to be essential to the highest success of the engineer, and the attempt is made to give every student such an education along with his engineering work. To this end the studies required by the college of liberal arts for the degree of bachelor of science are included in each course of the Engineering College.

NEW COURSES FOR MINING ENGINEERS AT THE UNIVERSITY OF WISCONSIN.

The newly established department of mining engineering at the University of Wisconsin has just published (April, 1909) a bulletin announcing 13 special courses in mining engineering for undergraduates, and an advanced course is being arranged for next year.

Ore dressing and assay laboratories are to be equipped in a building formerly occupied by the heating plant.

The course in excavation and quarrying will include railway grading, support of excavations, canal and submarine excavation, explosives, blasting, and allied subjects. Tunneling, boring, and shaft sinking will form another course, in which the ventilation, drainage, and timbering of mine shafts will be considered, with methods of sinking shafts through quicksands, rock, and earth, and hoisting expedients.

In the course on prospecting and mine development the relation of mining geology to exploration will precede the various forms of prospecting on the surface and by shafts and drifts, and the development of veins discovered. A separate course in exploration of mines will aid the student in learning methods of hydraulic and dredge mining, ways of coal mining, and salt and sulphur mining, with the maintenance of entries and air ways.

Mine accidents, their causes, control, and prevention, and rescue of men will be treated in the general course on mine engineering, in which the design, installation, and operation of all sorts of systems for draining, ventilating, lighting, hoisting, hauling, and signaling in mines will be taught. The generating and transmitting of power for surface plants, with the buildings, roads, and water supply for them will be a part of the work.

One of the advanced courses will cover the subjects of gold and silver milling and cyanidation, showing how stamp mills are operated, the forms of amalgamation, and methods of treating precious metals.

UTAH ENGINEERING EXPERIMENT STATION.

By an act approved March 11, 1909, the legislature of Utah established the Utah engineering experiment station as a department of the state school of mines of the University of Utah. The station is authorized—

to carry on experiments and investigations pertaining to any and all questions and problems that admit of experimental and scientific methods of study and the solution of which would tend to benefit the industrial interests of the State, or would be for the public good; also to publish bulletins and employ other feasible means of giving information to the public concerning the results of experiments and other work of the station.

It is not authorized to concern itself with problems that properly belong to the agricultural experiment station.

JOURNALISM.

UNIVERSITY OF WISCONSIN.

The course in journalism at the University of Wisconsin is a four-year course, leading to the degree of bachelor of arts. The condi-

tions of admission are those governing entrance to the college of letters and science of the university. The following information concerning this course is compiled from University Bulletin No. 296 (May, 1909):

The course includes studies of three kinds: (1) Those designed to familiarize the student with present social, political, and industrial conditions in the light of their history and development, as well as with the literature of his own and other languages; (2) those designed to develop the power of expressing his ideas effectively in writing; (3) those intended to give the necessary technical instruction in the history, development, organization, and methods of modern journalism. The course has been arranged in the belief that although the greater part of the time should be devoted to a study of the subjects of the first group, such as history, political science, economics, sociology, philosophy, psychology, language, and literature, which are fundamental to journalistic work, four years of practical training in all the details of newspaper work can also be given as a part of a regular college course.

The technical courses in journalism proper have been arranged with a view to giving four years' instruction and practice in all the important details of newspaper work. Two courses are devoted to the work of the reporter and correspondent, one to editing, one to editorial writing, and one to special feature and magazine work. The instruction includes a consideration of the organization and management of daily and weekly newspapers; the methods of local, state, and national news gathering; the mechanical side of newspaper making; and the history and development of American journalism. In addition to the regular instruction, special lectures on various phases of journalistic work are given every year by newspaper and magazine editors.

Practical experience in all kinds of newspaper work is given in the courses in journalism and on the Daily Cardinal, the official university paper, which is edited by the students in these courses, under the direction of the instructor. Students in courses 1 and 2 (newspaper writing and reporting) act as reporters on the Cardinal; those in course 3 (newspaper editing) fill, in rotation, the positions of managing editor, assistant managing editor, exchange editor, city or university editor, and copy readers; those in course 4 (editorial writing) do the editorial writing as editor in chief and associate editors. As the Cardinal is published at one of the Madison newspaper offices, the student editors become familiar with the mechanical part of newspaper publishing.

A course in the law of the press, including the law of copyright, literary property, libel, privileged publication, and other topics relative to the publication of books and newspapers, and a course in current political topics and their effective literary presentation, are given for the students preparing for journalism by the department of political science.

The advanced courses in journalism, history, political science, political economy, and English offer students the opportunity of doing graduate work in preparation for journalism.

A newspaper office, with typewriters, files, indexes, and reference books, is maintained as a laboratory for the students of journalism. Index and filing cases are maintained to show the methods of preserving photographs, illustrations, clippings, and biographical material.

Although the course outlined is designed primarily for those preparing for newspaper and editorial work, the arrangement can be readily modified to meet the needs of students desiring preparation for technical or trade journalism. Courses especially designed to meet the needs of those who desire to

take up agricultural journalism, either as contributors or editors, are offered in the College of Agriculture.

The students of the university edit and manage a number of publications, all of which offer excellent opportunities for practical experience in various kinds of journalistic work. Places on the editorial and business staffs of these publications are awarded for the most part on a basis of literary and executive ability and are open to practically all students of the university.

In accordance with the elective system of the university, students preparing for journalism are not restricted to a fixed course of study, but are permitted to elect any studies which they are qualified to pursue.

UNIVERSITY OF MISSOURI.

The school of journalism of the University of Missouri is a professional school for training in journalism, taking rank with the schools of education, engineering, law, and medicine.

The distinctive feature of the work offered by the school of journalism consists in the courses in the history and principles of journalism, comparative journalism, reporting, newspaper correspondence, editorial writing, newspaper jurisprudence, illustrative art, newspaper publishing, advertising, and newspaper administration. While all knowledge may be helpful to the journalist, those branches which bear directly upon his daily work are most important. Among these, in addition to the professional courses, are English, history, economics, government, finance, sociology, and psychology.

A small but well-balanced general newspaper, the University Missourian, is issued each school-day afternoon, giving to students actual laboratory work, the training of a real newspaper office. This laboratory work has been developed to supplement class instruction in the gathering, handling, and presentation of news and comment.

The requirements for admission are those of the college of arts and science; but beginning with 1911 two years of college work, or its equivalent, will be required for entrance to this school. Only one undergraduate degree is conferred, that of bachelor of science in journalism.

In order to secure the degree of bachelor of science (B. S.) in journalism, the student must fulfill the following conditions:

1. He must be regularly admitted to the department.
2. He must complete during the first two years of his course five hours i. e., five periods a week for one semester) of English, five hours of history, and ten hours of the other social sciences (economics, sociology, political science), five hours of physical or biological science (astronomy, chemistry, geology, and mineralogy, physics, botany, zoology, physiology), five hours of modern languages, and five hours of mathematics or logic and psychology.
3. He must complete work in journalism to the amount of twenty-four hours. The greater portion of this work should be taken during the junior and senior years.

4. The total requirement for graduation is one hundred and twenty hours. (Compiled from the University Bulletin, May, 1909.)

JOURNALISM IN OTHER INSTITUTIONS.

Courses in or schools of journalism have been organized or are in contemplation in several other universities, principally in the Middle West. The University of Virginia announces a course in journalism in its school of English literature, which "aims to give the student such instruction and practice in journalism as can be given outside of a newspaper office." Columbia University several years ago received a million dollars from Mr. Pulitzer, proprietor of the World newspaper, for the endowment of a school of journalism, but it has not yet been put in operation. The students of Cornell University publish the Cornell Daily Sun, which is said by a critic unfriendly to schools of journalism^a to be a better school of that kind than any board of trustees or faculty could produce.

MEDICINE.

COUNCIL ON MEDICAL EDUCATION OF THE AMERICAN MEDICAL ASSOCIATION.

The Fifth Annual Conference of the Council on Medical Education of the American Medical Association was held in Chicago, April 5, 1909. Besides the members of the council there were 90 delegates, representing 21 state examining boards, 3 national medical associations, medical colleges, colleges of liberal arts, state medical societies, and departments of the National Government. The council on medical education is a permanent committee on education of the American Medical Association, and has its headquarters in Chicago with the association. The conference, therefore, was fully representative of American medical education, and its proceedings were of great importance.

The chairman of the council, Dr. Arthur Dean Bevan, of Chicago, was explicit in his statement that the council was only an advisory body; that its conclusions were not binding on state boards or medical colleges. Doctor Bevan made the opening address, in which he referred to the work of the four preceding conferences and concluded with mentioning the needs of the present time. At the third conference, in 1907, a full report on the medical colleges of the United States was made after a personal inspection. Eighty-two colleges were reported as acceptable, having a grade of over 70, out of a

^a Theodore Stanton, in the North American Review for August, 1909.

possible 100; 46 were placed in a conditional group, while 32 were rejected. At the fourth conference, in 1908, a full report was made of medical education in the United States and in 20 other of the most important countries of the world. It was stated that more than 50 first-class medical schools in this country had agreed to require an additional preparatory year, to be given to physics, chemistry, and biology. The state medical examining boards were reported to be the most effective agents in raising the standard both of preliminary education and of the regular course.

College mergers.—Doctor Bevan commended the plan of merging two or more medical schools into one strong institution. In Indiana all of the regular schools were consolidated with the state university; the university of Louisville, Ky., now represents five former medical schools; in Cincinnati, two schools have been consolidated, and two in Minneapolis.

Report of the secretary.—Dr. N. P. Colwell, secretary of the council, made a report of the work of the past year. A serious difficulty in the way of securing adequate general education of medical students was the lack of good, well-equipped high schools in some of the Northern States as well as in the Southern. In the latter section great progress is being made in the establishment of high schools, and it is thought that in a few years this obstacle will be removed. Seventeen medical schools now require for admission two or more years of work in a college of liberal arts; 11 other schools announce that they will require two years, and 22 others will require one year of a college course. Six state examining boards have adopted a regulation requiring one or more years of a college course as the preliminary education of applicants for medical licensure; Minnesota and North Dakota require two years; South Dakota, Colorado, Kansas, and Connecticut require one year. Several other States are contemplating similar action.

After the consolidation of the medical schools in Louisville, Ky., the city granted the medical school an appropriation of \$25,000 and took steps to provide a new city hospital, to be under the control of the school. A new city hospital will also be built in Cincinnati, adjacent to the medical school, and a new medical college building will be erected.

The College of Medicine of the University of Southern California has become a department of the state university, and hereafter the work of the first two years will be at Berkeley, while that of the last two years may be either in San Francisco or Los Angeles. Cooper Medical College, of San Francisco, has become the medical department of Leland Stanford Junior University and will be located at Palo Alto. The number of medical schools is now reported as 148, while five years ago there were 166. Two of these,

which formerly gave instruction at night, have changed to day schools.

Three state boards, those of Colorado, Massachusetts, and Ohio, included practical tests in the examination of applicants for license. These tests included the making of urinalyses and the identification under the microscope of histologic, pathologic, and bacterial specimens. Two other boards, those of Indiana and Minnesota, have announced that practical tests will hereafter be required.

In three States—Alabama, Arkansas, and Rhode Island—amendments to the practice acts have been secured requiring that all applicants for license be graduates of reputable medical colleges. This leaves only three States—Massachusetts, Mississippi, and Tennessee—which still allow nongraduates to secure licenses other than through reciprocity.

Indiana, Iowa, and Nebraska have provided for examinations in two parts, whereby the fundamental medical branches may be passed at the end of the sophomore year, this credit to be accepted toward the examination for license after the student has graduated. There are now eight States having this two-part examination, as follows: Colorado, Indiana, Iowa, Maryland, Michigan, Nebraska, New York, and Virginia.

In only one instance during the past four years has a State retrograded in its standards for medical licensure. This occurred during the last year in Oklahoma. * * *

In only a few States is there any check on the incorporation or chartering of medical schools. In most States any body of men, by paying the required fee, can incorporate as a college or university, often with authority to grant any degree under the sun, no question being asked as to the ability to furnish education of the standard generally supplied by the better colleges and universities. And seldom is there any means of control over such institutions, even after they are incorporated.

No such unchecked educational institutions are allowed to exist in any other country and, so far as we have been able to learn, in no other country are to be found so many medical sects or pseudo-medical institutions. There are now some 30 or more nondescript medical fads in a long procession demanding legal recognition, separate boards, or representation on examining boards. In some instances the influence has been seriously demoralizing.

The conclusions reached by the secretary are:

1. There are too many medical colleges in the United States, being nearly as many as in all the rest of the world combined.

2. As a result, there is an active competition for students, with a resultant disregard of preliminary qualifications and a hindrance to the development of high schools.

3. The methods of teaching in vogue fifteen or twenty years ago are still pursued in some medical schools.

4. Medicine to-day really demands more than a high-school education, and there should be at least one year's work in physics, chemistry, and biology, and a reading knowledge of French and German.

5. Medical schools need trained teachers, and, for the fundamental sciences, men giving their entire time, and paid full salaries.

6. Medical schools must have hospitals owned by them or under their control. The patients would receive better attention from the attending physicians on account of the presence of students. They should also have proper supervision.

7. Medical schools should be departments of universities in reality, not in name only, and they should be liberally endowed.

8. Reciprocity of licensure should be allowed in all the States, as its denial would involve great hardship on old practitioners who desire to move to another State, but it should have safeguards preventing young graduates from seeking admission by it to a State where they failed on examination. It should only secure a waiver of the examination, not of the other requirements.

Standard medical curriculum.—The medical curriculum had been divided into ten sections, and as many committees had been appointed to report upon them. The council indorsed the recommendation of several of the committees that state examining boards cooperate in the effort for more thorough and sound instruction by confining their questions on drugs to the important and commonly used ones. The committee on anatomy condemned the old lecture system, which has given place to laboratory examinations and dissections. The average yearly expenditures for the anatomic departments were given as follows: At five endowed institutions, \$19,600; at four state universities, \$11,600. In surgery it was recommended that, notwithstanding the great progress that has been made in surgery, young graduates who have not served as internes in a hospital should not at once undertake full practice in surgery, unless located in rural communities where no experienced surgeon is accessible. In obstetrics it was stated that over 6,000 women die annually in confinement and that countless numbers are made invalids by injuries received at such times.

Practical examination of medical students.—Dr. Wm. T. Councilman, of the Harvard Medical School, is an earnest advocate of reform in examinations by state medical boards. He claims that the written examination, heretofore almost universally depended upon, is not an adequate test of fitness to practice, and that a serious objection to it is that it encourages wrong methods of medical education; that the medical schools endeavor to prepare their students to answer questions of the medical boards, instead of how to recognize and treat disease. He goes on to say:

That this [the written examination] is the easiest and the quickest method of examination no one will deny. That it is an absolutely unsuitable method every one who has been engaged in teaching and examining students will recognize. In the first place there is a very great difficulty in the preparation of questions which will really test a candidate's knowledge. * * * The matter of examination passing has been rendered very much more facile by the preparation of quiz compends in which the questions of state boards are analyzed

and suitable answers given. Any man of proper intelligence by the use of such a quiz compend can prepare himself in the course of a few months for such an examination without any real medical training at all.

The examination for admission to the practice of medicine should not be a written examination, to show what the candidate remembers and can write, but a practical examination to show what he really knows and can do. The real efficiency of a medical man depends largely on his knowledge of methods of diagnosis and treatment and his facility in the use of these methods, and that a candidate has this knowledge and ability can only be tested by the actual demonstration. This, I think, will be admitted on all sides.

The objections which are urged against such methods of examination are numerous. In the first place, it is said that the examiners themselves at present are incapable of conducting such examinations. If this be true, and I hardly believe it, they should give up their offices to those who are capable of conducting such examinations. * * * It is also said that the state boards have not the facilities for conducting such examinations. This is not true. I feel perfectly sure that every assistance will be given to the state examining boards by the medical schools in the State. They will offer their laboratories and all their facilities. The examination should not be held in places where facilities of this sort can not be provided. The laboratory side of the practical examination is the least. The practical examination should embrace the clinical as well as the laboratory side of medicine. There is no difficulty whatever in providing material for the clinical examination.

As already stated, three States have adopted the practical-examination method, and it seems probable that it will be very generally tried, and if the time and necessary facilities can be provided it will continue in use. The secretary of the Massachusetts board says that their experience indicates that it is practicable to conduct examinations in microscopy, in the laboratory, and with the manikin along the lines of practical work.

The use of the microscope, stethoscope, anatomic demonstrations, bandaging, the application of surgical dressings, etc., will hereafter figure prominently in our examinations.

Dr. Richard H. Whitehead, of Charlottesville, Va., spoke of medical education in the South and the difficulty of adopting higher standards of preliminary education at present, but felt that this trouble would soon be removed. He says:

I am confident that it would be a mistake, so far as the South is concerned, for this council to lower the standard out of consideration for southern difficulties, or for any other reason. On the contrary, the South needs that standard as a goal to be striven for; and it must not expect other sections of the country to retard their own progress. It must, in large measure, work out its own medical salvation; not in fear and trembling, however, but with courage, patience, and wisdom. That it can and will do so, I have no doubt. The revival in education—primary, secondary, and collegiate—now going on in many Southern States is, perhaps, imperfectly understood and appreciated in the North and West. It is a movement of great extent and power, well organized, and intelligently directed toward a definite end. Just at present the bulk of this effort is being expended on the secondary schools. The public secondary schools have been strengthened greatly, and 680 new ones have come into

existence in the last three years. During the same time there are few southern colleges of any standing which have not increased their requirements by amounts varying from 25 to 150 per cent. Moreover, the material wealth of the South is increasing so rapidly that it promises soon to become a most prosperous country. The spread of the idea of local taxation guarantees in the near future a system of public schools of definite and permanent importance. So that the day is not so very far off when there will exist the proper basis for high standards in medical education. Already the leaven of high ideals is working in at least three southern universities. And so, I say, do not worry about the South; it will work out its educational development in due time. In the meanwhile the council can be of much service by stimulating, encouraging, helping—but not by lowering its standard.

Dr. Egbert Le Fevre, of University and Bellevue Hospital Medical College, favored a broader training for entrance to medical schools, and the requirement of a knowledge of chemistry, physics, and biology. He doubted, however, whether this would be secured by the requirement of one or two years of a collegiate course. Ninety-eight per cent of those who enter college do so without knowing what profession they will enter, and the instruction they receive there is designed to give a liberal education, not to prepare for medical study. Student work in colleges is not intensive, while in medical schools it is intensive. Moreover, a large number of medical graduates, 69 per cent in Bellevue, secure hospital appointments. There they receive valuable technical instruction.

Dr. John M. Dodson, dean of Rush Medical College, spoke of the difficulty under which the medical schools of Chicago labor, where they instruct students from many different States. The colleges endeavor to comply with the requirements of the state examining boards, but find it difficult on account of the variations. One State specifies a curriculum of 27 branches, giving the exact number of hours to be devoted to recitations, to laboratory work, to clinical work, etc. Another board will make a different arrangement. He therefore urges that examining boards, while insisting on a complete, practical medical training, shall not hamper the progress of education by preventing experiments in new and possibly better methods.

MUSIC.

MUSIC TEACHERS' NATIONAL ASSOCIATION.

The Thirtieth Annual Convention of the Music Teachers' National Association was held in Washington, D. C., December 28, 29, and 30, 1908. Of especial educational interest was the adoption of the report of the subcommittee on public schools, which recommends raising the standards of attainment in music among public-school children.

The report as read follows:

AIM AND REQUIREMENT.

The proper study of music trains the intellect, awakens the emotional nature, provides a medium for the expression of emotion, develops a love for the beautiful, leads to the recognition and appreciation of great works of art, adds to the pleasures of life, and exerts a cultivating and inspiring influence on character.

GENERAL AIM.

1. Briefly stated, the aim is as follows: First, to develop an appreciation of good music; second, to develop the emotional nature and the æsthetic sense by the interpretation of good music; third, to teach the language of music for reading and singing.

2. More specifically stated, the aim in the teaching of music in the grammar schools is to present the subject so that a pupil at graduation shall have acquired:

(a) The ability to render any standard song, previously prepared, with agreeable tone and phrasing (implying breath control); feeling for the spirit, the tempo, and character of the song.

(b) First, the ability to sing at sight, with words, a melody of moderate difficulty, such as the easier hymn tunes and folk songs, or any part of a three or four part song of that degree of difficulty; second, the ability to sing at sight an eight-measure phrase, without words, in any major or minor key, with any time signature, employing the use of one, two, three, or four tones to the beat, common forms of the unequally divided beat, syncopation and chromatic tones in common use.

(c) First, for writing, the knowledge of all fundamental principles of time, note values, measure structure, and signatures; second, the knowledge of two clefs, all fundamental knowledge of keys and key signatures, major and minor, sufficient knowledge of the five characters used to represent chromatic tones to insure intelligent reading; third, the knowledge of common Italian terms for tempo and expression.

(d) Some knowledge of good musical literature, implying the memorizing of some standard songs or themes from compositions, with some biographical knowledge of the great composers.

Attention should be given to ear training and tone production.

It will be the policy of the association in the future to seek to attain ends similar to those suggested in this report in high schools, colleges, and universities.

Papers were read on other phases of musical education by Albert A. Stanley, of the University of Michigan; Henry Suzzallo, of Teachers College; Leonard B. McWhood, of Columbia University; President Waldo S. Pratt, of the Hartford Theological Seminary; Frederick W. Root, of Chicago; George L. Raymond, George Washington University; George W. Chadwick, of New England Conservatory of Music; Arthur L. Manchester, of Converse College; Oscar G. Sonneck, Library of Congress; and William H. Hunniston, of New York City.

The principal officers of the association for 1909 are Rossetter G. Cole, University of Wisconsin, president; Ralph L. Baldwin, Hartford, Conn., secretary.

POLITICAL SCIENCE.

A new course in the administration of punitive justice, to be given in the department of political science at the University of Wisconsin this year by Prof. R. B. Scott, will deal with the methods of discovering, prosecuting, and punishing crime; the functions of the police, prosecuting officials, and jury; and the defects in the administration of criminal laws.

Another new course in the same department is that by Dr. Paul S. Reinsch on Latin-American political institutions, in which he will present a comparative study of the constitutional and administrative systems of the Latin-American republics. (University Bulletin, Aug. 16, 1909.)

RAILWAY ADMINISTRATION.

The University of Michigan announces for 1909-10 a special course in railway administration. It is the design of this course to provide university instruction for four classes of students:

First. Those who desire to enter any of the business or administrative departments of railway service.

Second. Those who desire to enter the service of the federal or the state governments as statisticians or economic investigators for railway commissions or other bureaus which have to do with the administration of laws touching the business of transportation.

Third. Those who propose to undertake statistical or appraisal work as a feature of the business of banking or brokerage.

Fourth. Those who desire to attain, as a part of a general education, a scholarly understanding of that complex set of industrial and governmental interests and activities which make up what is known as the "transportation problem."

The programme offered covers four lines of instruction:

1. General courses in mathematics, physics, chemistry, modern language, and rhetoric, such as are required of all candidates for a degree, and in addition eighteen credit hours of general elections.

2. From the law department there have been selected certain courses of especial significance to students of transportation, on the ground that a man who is to move up in the railway service or who is to assume a position of responsibility in government employment should know certain fundamental principles of law.

Among the required subjects will be found courses in contracts, in bailments and carriers, and in railway law.

3. The faculty of the engineering department also provides certain lines of instruction of importance to students of the economics of transportation. Among these courses may be mentioned shop prac-

tice, surveying, prime movers, and specifications and contracts. A special course in drawing and projections, given in the literary department, and a course in railway engineering, given jointly by instructors from the engineering and literary departments, fall within this group of studies.

4. The department of political economy must, however, furnish the larger part of the special instruction offered in this course. Besides the general courses which this department offers, certain technical or semiprofessional courses have been provided, such as principles of accounting, railway organization and operation, railway finance, railway tariffs, and railway statistics and accounts. (Compiled from University Bulletin, Vol. X, No. 20.)

XI. AGRICULTURAL EDUCATION.

ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

The Twenty-second Annual Convention of the Association of American Agricultural Colleges and Experiment Stations was held at Washington, D. C., November 18-20, 1908. In addition to the delegates, a number of visitors representing foreign agricultural departments, societies, and institutions were admitted to the privileges of the floor.

The committee on graduate study, in their report, urged the continuance of the graduate school, and recommended that every college and experiment station make arrangements by which at least a portion of its staff might have an opportunity to attend each session.

The report of the committee on extension work, of which President Kenyon L. Butterfield, of the Massachusetts Agricultural College, was chairman, emphasized the pressing need of organized work at the agricultural colleges to reach more completely the working farmers of the country. It was stated that probably not one farmer in twenty-five ever attends a farmers' institute. The recommendation that each institution represented in the association organize as soon as possible a definite scheme of extension work in agriculture was approved by the convention.

In view of the circumstance that the trustees of the Carnegie Foundation have consented to admit to its benefits institutions of the class of the land-grant colleges on certain conditions (see p. 88), the convention, by formal resolution, expressed its appreciation of this action. Dr. Henry S. Pritchett, president of the Carnegie Foundation, addressed the convention upon the functions and policy of the

foundation, upon agricultural college standards, and the relations of these colleges to the foundation and to the general educational system. The following abstract of his address, which was of general interest, was prepared for publication in the proceedings, which appeared in Bulletin 212 of the Office of Experiment Stations of the Department of Agriculture (issued July 10, 1909):

The Carnegie Foundation, which has now within its disposal some \$16,000,000, is endowed not only as an agency for the establishment of a retiring-allowance system, but as a power in the direction of work in higher education. The retiring-allowance system is only one of the many avenues of work on which the foundation may enter. It is the first and principal work, and probably will be the principal work for some time to come. In administering this system it quickly became evident that to elevate the condition of the teaching body in America a retiring-allowance system must be such that men come under it as a right, not as a matter of vote by a board of trustees; under fixed rules, not under uncertain arrangement. The Carnegie Foundation realized that its business was to deal with institutions, not with individuals; to say what institutions are eligible by reason of the work they are doing, by reason of the standards which they are upholding, and by reason of their relation to the system of general education in their respective States; and that once an institution is declared eligible its professors shall receive retiring allowances under fixed rules, exactly as they receive their salaries. To carry this idea into administration, the practice of the foundation is to pay the retiring allowance in such a recognized college not directly to the professor, but into the treasury of the college.

This being the basis of the retiring allowance system, the foundation was frankly brought to the consideration of what is a college. It found, approximately, 1,000 colleges in the United States, Canada, and Newfoundland. By what rules should these colleges be admitted to share in our endowment? Should we say that all institutions are colleges which call themselves so, and attempt no educational criterion with respect to what is the work of a college? That would have been to throw away all educational significance from the foundation.

So we were driven to the effort to discriminate between these 1,000 colleges. At the outset of our operations we had to study the organization of colleges in English-speaking America, and of course we had to consider college organization from the standpoint, not of a single institution nor even of a great State, but from the standpoint of a continent. This is, I think, the first agency which has undertaken to examine American colleges in Maine, California, Florida, Colorado, in the Provinces of Canada, and in the colony of Newfoundland. Whether our work turns out to be wise or not, it seems to me worth while to have such an agency with such a point of view.

In discriminating between the 1,000 institutions chartered as colleges we have assumed that in order to be truly a college or to be truly a technical school in the sense of higher education an institution must articulate with the standard high school. But in order to serve the people of its State a college should not articulate with the standard four-year high school, unless that high school is a reasonable prerequisite for the kind of education the people wish to obtain. In other words, a college ought to place itself squarely upon the educational system of its State, and if that educational system includes the four-year standard high school, then the Carnegie Foundation can recognize the college as an institution of higher learning. On the other hand, although by our charter the foundation can not recognize as an institution of higher learning a college which

is not thus based upon the standard four-year high school, a lower standard may be the only wise course for an institution, owing either to the nature of its work or to the condition of the community it is its duty to serve. For a college to attempt to put itself upon the top of a four-year high school, unless this course was justified by the interests of the people of the whole State, would be an educational crime.

The question, therefore, both for us and for you, is whether the agricultural and mechanical colleges supported from the land-grant donations are essentially institutions of higher education. There are really three kinds of these agricultural colleges. First, there is a small group of institutions, like the Massachusetts Institute of Technology and the University of Vermont, which are institutions upon private funds governed by self-perpetuating trustees, but which received a share from the original Morrill grant. This group need concern us little. The Morrill fund played but a small part in their development. Second, there is the group of state universities to which the Morrill grant was given for a separate college of agriculture within the university organization; and, third, there is the largest group of those institutions founded under the Morrill Act, supported in part by it, which undertake to furnish a course in agriculture and a course in what is ordinarily called the "mechanic arts."

The question of the comparative wisdom of these last two types of organization, whether it were wiser to make the college of agriculture a part of the state university, or whether it were wiser to organize the college of agriculture as a separate college, is a question which has already been practically settled in every State. There are advantages and disadvantages in both solutions. To have all the institutions of higher learning of a State brought into one great institution is a certain advantage from the standpoint of power and of the lack of duplication of work. It also avoids the tendency to pit one part of the State, which has the agricultural and mechanical college, against another part, which has the state university, in the attempt to secure favorable legislation. Also, I am inclined to think that when a college of agriculture is made a department of a state university it is more likely to attend to the business of agriculture and nothing more. The college of agriculture and mechanical arts has tended to become a school of engineering, with an agricultural feature added. For this there is a pedagogical reason—the teaching of engineering was already systematized when these institutions were established; it was pedagogically a simple thing to teach engineering. That is what mechanic arts came to mean. It did not mean teaching the work of a farmer or of a mechanic; it came to mean engineering, and from this it came to pass that there has been a tendency in the separate college of agriculture to develop along the lines of an engineering college.

On the other hand, the separate college of agriculture has certain advantages. In any institution of learning we seek to separate incongruous phases of education. That is why we separate the high school from the college and the college from the university. We do this because experience has shown that we can not put incongruous phases of education—phases which seek to deal with men of very different preparation and men of very different aims—into one institution as successfully as we can into different institutions.

Agriculture has certain duties, certain needs, certain opportunities which are distinctive, which belong to it, which do not fit together with what we have come to consider the work of a university. This gives the separate agricultural college its great advantage. Take, for example, entrance requirements. It is not at all clear to me yet that the entrance requirements for a student of agriculture ought to be the same as the entrance requirements for the ordinary

college student. That question is an open one. I find, in looking over the agricultural and mechanical colleges, their curricula, their work, their catalogues, and in visiting some of them, that the variation of their entrance requirements is much greater than the variation of entrance requirements in the state universities. Some of you have entrance requirements quite equal to those of the colleges of New England; some of you have entrance requirements which do not necessitate one year of the standard high school. In other words, there is a wide divergence amongst yourselves as to what your duty is in education, of what your purpose is. You have not yet brought about in your own conception, so far as I can understand it, any uniformity as to what your mission is, as to what your work is, as to what your relations to education are to be. This is exactly what the Carnegie Foundation desires to know.

I do not mean by this emphasis on entrance requirements that a college or university may deal only with the students who have regularly matriculated. A college which limited itself to that sort of teaching with a great body of men would be an extremely limited institution; a college which followed that policy ought really to adopt the business nomenclature of such-and-such a college, limited. But an institution which sets itself up to be a college and to print in its catalogue a list of 600 students, of whom 475 are in farmers' courses, and in various courses for six weeks, does not, in my judgment, come up to the standard college which I allude to. You should make it clear to the people who come, to the public, to all who have to do with your constituency, that the extra work, however useful, however desirable, however important, is not college work. By all means do the work, but make it clear that only those are college students who come up to a certain standard; that the others are what the Germans call "hospitanten."

The foundation not only wishes the agricultural colleges to make clear to us what their field of education is, but also what is their relation to the general educational system of their respective States and regions. It is not enough for a college to say, "We put up our standard to a four-year high school." I would say to that college, "What arrangements have you made to have your men prepared for your college after you have put it up on these stilts? Where are the schools that are to prepare students for the college? What sort of relations do you have with these schools?" We can not too often bring before our minds that the educational system of our State is one, not a set of unrelated, separate schools.

Then, finally, we ask you if you wish to come into relations with us, that in the establishment of your standards, concerning which, of course, we have nothing to say, that you make clear to us that the standards shall be real ones. A reasonable standard, honestly maintained, honestly lived up to, frankly and squarely applied, is worth more in the way of educational righteousness than any standard, however high, which is only on paper.

In conclusion, I may say that I do not believe that any section of the United States, whether that section be north, east, south, or west, can afford to ask the foundation to accept special standards of entrance for itself. This is true if for no other reason than that the very act of asking for special standards is a confession of weakness. So long as one section remains outside the standard for which the great majority of educated men stand, just so long they cut themselves off from the opportunity to influence in a large way the intellectual standard of the whole country. I may say that since the Carnegie Foundation began its work three years ago great progress has been made toward the unifying of college entrance requirements. At that time there was scarcely a college south of Mason and Dixon's line whose entrance requirements were such as to demand a four-year high-school preparation. Since that date a number of insti-

tutions have placed themselves upon such a basis, and at a meeting of the Southern Education Association, which I attended two weeks ago, after a two days' discussion the association resolved unanimously that, beginning with 1910, their colleges should all go upon the basis of the standard four-year high school as a prerequisite for college entrance. This seems to me a result not only of great value educationally, not only of great value socially, but also of great value as a national asset.

The following officers were chosen for the ensuing year: President, M. A. Scovell, of Kentucky; vice-presidents—first, W. J. Kerr, of Oregon; second, C. E. Thorne, of Ohio; third, H. T. French, of Idaho; fourth, W. D. Gibbs, of New Hampshire; fifth, A. B. Storms, of Iowa; bibliographer, A. C. True, of Washington, D. C.; secretary and treasurer, J. L. Hills, of Vermont. Members of the executive committee: From the section on college work and administration, J. L. Snyder, of Michigan; W. E. Stone, of Indiana; W. O. Thompson, of Ohio; from the section on station work, W. H. Jordan, of New York; C. F. Curtiss, of Iowa.

The next annual convention will be held at Portland, Oregon, August, 1909.

REPORT ON THE RHODE ISLAND COLLEGE OF AGRICULTURE.

Resolution No. 8 of the general assembly of Rhode Island, passed May 26, 1908, designated a commission consisting of the commissioner of public schools; James E. Sullivan, of Narragansett; Charles H. Ward, of Middletown; George F. Weston, of Providence; and Etienne C. Delabarre, of Woonsocket (succeeded by Hormisdas J. Cartier, of Warwick)—

to visit the Rhode Island College of Agriculture and Mechanic Arts, make a study of its aims, plans, and work, determine its educational value to the State, consider ways and means by which its service to the State may be enhanced—

And report thereon to the general assembly in 1909.

After a thorough examination of the work of the institution the commission rendered its report to the general assembly April 16, 1909, making the following recommendations:

In conclusion, the commission finds that, in accord with the purpose of its founding, the true function of the college is to provide free collegiate education for our youth of all classes, and that, in union of vocational and cultural education, its grand aim is to educate broadly for American citizenship. With this aim in view, the commission respectfully submits, as ways or means of increasing the value of the college, the following recommendations, which it has adopted after mature deliberation:

1. That the name of the college be changed to Rhode Island State College.
2. That the college be required by law to maintain the standard set by the Carnegie Foundation.
3. That the governing board include in its membership representatives of public education, agriculture, and manufacturing.

4. That to secure the advantages of a more permanent faculty of instruction, efforts be directed to insure longer terms of service to its members.

5. That the managing board appoint official visitors, who shall report annually to the board.

6. That tuition be free to all students.

7. That the extension department be enlarged and strengthened, so that the benefits of the college may be more widely and effectively applied, through correspondence, home courses, and lectures, to farming and manufacturing interests and to country and village life.

8. That the experiment station, in practice as it is in law, be more closely affiliated with the college as a department to secure greater unity of effort.

9. That the college maintain evening schools for industrial training in manufacturing centers, so far as its means allow.

10. That it offer to teachers summer courses in elementary agriculture and domestic arts.

11. That the instruction now given in military science and art be expanded and organized as a collegiate department for efficient military training of high rank. That measures be taken to organize a company of engineers from enlisted students, to be affiliated with the Rhode Island National Guard.

12. That the college be recognized as an integral part of the educational system of the State and that action be taken to bring it into closer relation with the high schools of the State.

13. That, to meet the apparent needs of the college, the following buildings be erected as soon as means are available: (1) Science, (2) library, (3) auditorium, (4) gymnasium and drill hall.

14. That, as favorable opportunity may offer, more land be secured to meet the future agricultural needs of the college, especially in experimental farming.

15. That, in making its annual appropriations for the college, the State not only have regard for judicious expenditure and its financial resources, but also, in keeping with its dignity and honor, it give due consideration to its obligations assumed for the support and management of the institution in its compact with the National Government.

The first three recommendations were at once acted upon favorably by the general assembly.

SCHOOL FARM CONDUCTED BY THE UNIVERSITY OF CALIFORNIA.

By an act of the legislature of California passed in 1905, a school farm was provided for on which both the theory and the practice of farming could be taught. Seven hundred and eighty acres of land were purchased contiguous to the town of Davis and the necessary equipment was installed. The farm is conducted under the direction of the University of California.

A notable feature of the institution is the short courses offered to farmers who are already engaged in farming, and whose business interests will not permit of a long residence away from home. These courses were introduced in 1908. They range in duration from two to eight weeks. Instruction is given in dairy manufacture; irrigation, soils, forage crops, and cereals; poultry husbandry; animal industry and veterinary science; horticulture and viticulture. These

courses are open to all persons over 17 years of age. No entrance examinations are held nor is—

any requirement imposed except an earnest desire to learn and to make the best use of the opportunities freely offered by the State through its university.

The regular course designed to cover a period of three years is open to boys of good moral character over 15 years of age. In addition to training in the theory and practice of farming, instruction is given in English, mathematics, history, and civics. No effort is made to prepare students for college.

Matriculants must have completed the eighth grade of the grammar school, or must pass a satisfactory examination on the subjects included in the ordinary grammar school course. During the first year only boys have been received, owing to the lack of dormitory facilities and equipment for girls, but it is planned to offer in the near future courses in domestic science, domestic arts, and other subjects of interest to women in rural life.

Prof. Leroy Anderson is superintendent of the farm.

UNITED STATES FORESTRY STATION FOR THE UNIVERSITY OF WISCONSIN.

The United States Forest Service has just decided to locate its experimental laboratory station at the University of Wisconsin. The establishment of this station at the university was strongly advocated both by the State Timber Land Owners' Association and by the Wisconsin conservation commission.

The regents of the university at their last meeting agreed to provide a suitable building on the university campus for this laboratory. Steps will be taken to have this building erected at the earliest possible date. The United States Forest Service will equip the laboratory, at a cost of \$14,000, and will provide the entire staff of investigators, whose salaries will aggregate \$28,000 a year.

The new laboratory will be available to university students and members of the faculty for investigative work, and the members of the station staff will give lectures to students on the various phases of forestry in which work is being done in the laboratory. The university will thus have practically all the advantages of a school of forestry that will be the most thoroughly equipped in the country.

The character of the investigations to be undertaken makes the establishment of the station at Wisconsin of the greatest importance to the paper and lumber industries of the State. Wood-pulp experiments to determine the fitness of various woods and other vegetable fibers for the manufacture of paper will receive much attention. A miniature pulp mill, fully equipped for the manufacture of pulp by

the sulphite process, together with such equipment as the lead-lined digester, a beating engine, a pulp screen, and a knuckle-joint press, will be installed.

Timber tests to determine the mechanical properties of different woods and the influence on these properties of various methods of treating and handling will be of value to lumbermen. Testing and woodworking machinery valued at over \$8,000 will constitute part of the equipment. The preservation of wood, such as railroad ties, etc., by different processes and the use of preservative fluids is to be another important field of investigation for which complete equipment is to be provided in the form of treating cylinders, pressure and storage tanks, pumps, and air compressors.

Experiments in wood distillation to determine the best methods of securing such products as turpentine, rosin, etc., from wood waste are to be carried on on a large scale. Chemical analyses of commercial products derived from wood will be conducted in the well-equipped chemical laboratory.

The location of the laboratory in the heart of the great forest district of the country, the three great forest states being Michigan, Wisconsin, and Minnesota, will give the station unexcelled facilities for carrying on every phase of its work under the most favorable circumstances. (University Bulletin.)

AGRICULTURAL EDUCATION EXTENSION.

University of Minnesota.—An act of the legislature of Minnesota approved April 22, 1909, authorizes and directs the establishment of a division of agricultural extension and home education in the department of agriculture of the University of Minnesota, and appropriates the sum of \$50,000 for the purpose of establishing and maintaining the division during the two years beginning in September of 1909 and 1910. It provides that all persons who reside in Minnesota shall have the right to take, free of charge, any courses of instruction offered in the division.

Ohio State University.—An act of the legislature of Ohio, approved March 12, 1909, requires the college of agriculture and domestic science of the Ohio State University to arrange for the extension of its teachings throughout the State, and appropriates \$20,000 for the purpose. It shall arrange to hold schools in which instruction shall be given in soil fertility, stock raising, crop production, dairying, horticulture, domestic science, and kindred subjects. Each school shall not exceed one week in length, and not more than one shall be held in any county during a year. It shall also give instruction and demon-

stration in various lines of agriculture, at agricultural fairs, institutes, granges, clubs, etc. It may include instruction by mail and the publication of bulletins.

Agricultural College of Utah.—An act of the legislature of Utah, approved February 26, 1909, requires the Agricultural College of Utah to hold at least one meeting, institute, or one or two weeks' school in each county each year for the instruction of the citizens of Utah in the various branches of agriculture and domestic science, and appropriates \$5,000 annually for the purpose.

LEGISLATION IN BEHALF OF AGRICULTURAL EDUCATION.

University of Idaho.—Approves and confirms the action of the regents in establishing and maintaining a college of agriculture in connection with the university at Moscow. (Act of Mar. 6, 1909.)

Montana Agricultural College.—Appropriates \$50,000 for the erection and furnishing of a woman's dormitory. (House bill No. 162, Mar. 12, 1909.)

Appropriates for 1910, \$38,500 for maintenance; \$12,500 for experiment station; \$10,000 for sheep barn, steer-feeding barn, poultry building, live-stock shed, and implement shed. Appropriates for 1911, \$40,000 for maintenance and \$12,500 for experiment station. (House bill No. 400, Mar. 12, 1909.)

New Hampshire College of Agriculture and Mechanic Arts.—Appropriates \$10,000 for current expenses for one year; \$8,000 for erection and equipment of dairy building; \$8,000 for sewerage and water supply; \$10,000 for grading, repair of buildings, improvement of athletic field, purchase of dynamo, and for stock and improvements in agricultural department. (Joint resolution of Apr. 9, 1909.)

Authorizes the trustees to apply for the benefits of the Carnegie Foundation for the Advancement of Teaching. (Act of Feb. 19, 1909.)

Directs the governor to issue his warrant upon the treasurer for the sum of \$7,971.82, to be paid on May 1, 1910, and quarterly thereafter, to the New Hampshire College of Agriculture and Mechanic Arts, as the income upon the Benjamin Thompson fund. (Act of Apr. 9, 1909.)

Rhode Island State College.—Changes the name of the Rhode Island College of Agriculture and Mechanic Arts to Rhode Island State College. (Chap. 417, 1909.)

Agricultural College of Utah.—Appropriates for general maintenance, including buildings, etc., for two years, \$164,300. (Chap. 114, Mar. 23, 1909.)

AGRICULTURAL HIGH SCHOOLS.

THE ARKANSAS SYSTEM.

The legislature of the State of Arkansas at the session of 1909 enacted a law for the establishment and maintenance of a public school of agriculture in each of four districts into which the State is divided for the purpose. The governor, with the concurrence of the senate, shall appoint in each of the districts five intelligent farmers to serve as a board of trustees of the school. After the first appointments, one member shall be appointed every second year to serve for a term of ten years. The course of study shall consist of at least practical experiment, treatises, or lectures on agriculture and horticulture, and as soon as practicable, and not later than one year after the opening of each school, there shall be established in connection therewith a textile school in which shall be taught the art of cotton manufacturing, and other textile manufacturing should the board deem it expedient. The faculty of each school shall consist of a principal, who shall be a graduate of some reputable school of agriculture; one instructor in stock raising and dairying; a competent textile instructor, and assistants as may be necessary. The duties of any of the faculty may be combined when practicable. The act provides that after the first buildings are erected and ready for temporary use, all work in, on, and about the schools or on the farm or in the barns, whether it be farming, building, care of stock, or whatever kind of work, shall be performed by the students. The act appropriates \$40,000 for each of the four schools provided for.

MONTAGUE (MASS.) AGRICULTURAL SCHOOL.

The Montague Agricultural School, Montague, Mass., was established by a vote of the town of Montague, June 30, 1908, displacing the Montague High School. It is organized under the Massachusetts commission on industrial education, and is under the management of a local board of trustees, in cooperation with the commission. The provisional course of study extends through five years and provides courses in agriculture for boys and girls and special courses in carpentry and mechanical training for the boys and courses in sewing, cooking, and domestic science and arts for the girls. The faculty consists of seven persons.

SCHOOL AT NORTHAMPTON, MASS.

Smith's Agricultural School and Northampton School of Technology, at Northampton, Mass., was opened for instruction October 1, 1908. To it are devoted the proceeds of a fund amounting to

\$310,660.39 bequeathed to Northampton by Mr. Oliver Smith for an agricultural school. The city of Northampton makes an annual maintenance appropriation of \$20,000, one-half of which is paid by the State. The institution offers four regular courses of study as follows: Preparation for farming, preparation for mechanical work, and preparation for housekeeping and home making, each covering four years, and a course for persons desiring to enter a college of agriculture or a normal school. Rev. R. W. Stimson, formerly president of the Connecticut Agricultural College, is the director of the school.

PETERSHAM (MASS.) AGRICULTURAL HIGH SCHOOL.

The Petersham Agricultural High School, opened at Petersham, Mass., in 1906, is a new departure in secondary agricultural education in New England. In the high school four courses are offered: A college preparatory course, a course in agriculture, a course in manual training, and a course in domestic science.

The course in agriculture includes instruction in—

1. The wild flowers, birds, animals, and their habits.
2. How to care for domestic animals, poultry, and bees.
3. The noxious representatives of the insect world, harmful fungi, and the methods of destroying them.
4. How to manage the dairy and culinary departments.
5. The rocks, their chemical composition, and the process by which the earth has been changed from a molten mass to a fit home for man.
6. The kinds of soil, their physical and chemical properties, the crops best suited to each, and the proper methods of improving, cultivating, and fertilizing them.
7. How to raise the best hay crop, and the culture of each of the standard crops grown on the farm.
8. How to raise, care for, and market both the large and small fruits.
9. How to conduct a market-garden business both in the open and under glass.
10. The principles of forestry and landscape gardening.
11. How to use the saw, plane, chisel, and to keep tools in good order.
12. The cost, description, and practicability of the most modern machinery for each kind of farm work.
13. The principles of rural architecture, road making, and village improvement.

The instruction in agriculture is based on the sciences and correlated with them where it is practicable, without interfering with a systematic and progressive course through the four years. The pupil's time is not consumed in manual labor. His compulsory part in field and garden work is intended merely to supplement the discussions and experiments of the class room. While crops and fruit are not grown for the pecuniary return, they are in all cases managed so that the pupil may draw correct conclusions as to the practicability of those pursuits from a business standpoint.

MINNESOTA SYSTEM OF STATE-AIDED SCHOOLS.

By an act approved April 19, 1909, the legislature of Minnesota provides that any state high school, graded, or consolidated rural school having satisfactory rooms and equipment may, upon application to the state high-school board, be designated to maintain an agricultural department. Each of such schools shall employ trained instructors in agriculture, manual training, and domestic science, and have not less than 5 acres of land. Instruction in the industrial department shall be free to all residents of the State. The department shall offer instruction in soils, crops, fertilizers, drainage, farm machinery, farm buildings, breeds of live stock, stock judging, animal diseases and remedies, production, testing, and hauling of milk and cream, manufacture of butter and cheese, growth of fruit, berries, management of orchards, market garden and vegetable crops, insects injurious to plants, diseases of plants, animal nutrition, including the use of forage crops, cereal grains, fine seeds, bookkeeping, farm accounts, and all other matters pertaining to general practice. Each of the schools shall receive state aid equal to two-thirds of the amount actually expended upon such department and vouched for, but in no case to exceed \$2,500 per year. Not more than ten schools shall be aided the first year, nor more than ten added to the list every two years thereafter. No more than one school in any county shall be added to the list receiving aid in any two years.

The act provides also that for the purpose of extending the teaching of agriculture, home economics, and manual training to pupils in rural schools, and for the purpose of extending the influence and supervision of state high or graded schools over rural schools, one or more rural schools may become associated with any state high or graded school maintaining a department of agriculture, which shall be designated as the central school. The act provides that rural school districts may levy a tax of not less than 1 mill nor more than 4 mills for the maintenance of agricultural education in the rural schools, which shall be under the supervision and direction of the principal of the central school.

TENNESSEE.

An act of the legislature of Tennessee, approved April 27, 1909, authorizes the state board of education to employ an inspector of high schools, and requires the elements of agriculture and home economics to be taught in all county high schools.

AGRICULTURAL DEPARTMENTS IN VIRGINIA HIGH SCHOOLS.

An act of the legislature of Virginia approved March 14, 1908, provides that so much of the sum of \$575,000 appropriated for public

schools and high schools as may be necessary, not to exceed \$20,000, shall be devoted to the establishment of departments of agriculture, domestic economy, and manual training in at least one high school in each congressional district of the State, to be conducted under such rules and regulations as the state board of education and the president of the Virginia College of Agriculture and Polytechnic Institute may prescribe.

DAVENPORT (WASH.) HIGH SCHOOL.

During the session of 1908-9 a beginning was made in agricultural instruction in the high school at Davenport, Wash. The plan has been in contemplation for several years, but did not reach its consummation until the last school year. A four-year tentative course of studies is outlined as follows:

First year:

First semester, physical geography.

Second semester, animal husbandry.

Second year:

First semester, botany.

Second semester, soils.

Third year:

First semester, manual training and forge work.

Second semester, manual training and forge work.

Fourth year:

First semester, fruit growing.

Second semester, farm mechanics and farm economics.

The course is given in the public high school, a part of the public-school system of the city of Davenport.

Blackburn College, Carlinville, Ill., offers a course in the elements of agriculture. According to a published announcement, the work offered in 1908-9 is equivalent to that of the freshman year in any first-class agricultural college. The instruction is given by Mr. Orville M. Kiser, professor of physics, chemistry, and the elements of agriculture.

The University of Florida inaugurated on November 1, 1908, a free correspondence course in agriculture for teachers. In June, 1909, applicants for first and second grade teachers' certificates will be required to pass examinations in agriculture.

The Bussey Institution of Harvard University, which was opened in 1861 as a school for undergraduate instruction in agriculture, has been reorganized as a graduate school for advanced experimental work and research in those subjects of applied biology which relate to agriculture.

The University of Idaho has organized a four-year undergraduate course in forestry and is establishing a forestry station on a section of land located on Lake Coeur d'Alene, in Kootenai County, for demonstration purposes.

A law of 1909 divided the State of Idaho into two educational districts and made provision for the establishment of a secondary agricultural school in each.

With a record-breaking attendance of over 1,300, the farmers' course, women's course, and special dairy course at the college of agriculture, University of Wisconsin, came to a successful close February 19, again demonstrating that brief courses of practical instruction meet the demands and needs of the several classes for whom they are provided. The success of the special courses in home making and in the operation and management of creameries and cheese factories, both of which were given for the first time this year, was especially notable.

Over 400 women, representing 29 counties of Wisconsin as well as 8 other States, attended the lectures and demonstrations in cooking, nursing, and other subjects pertaining to home making. (University Bulletin, Feb. 22, 1909.)

XII. INDUSTRIAL TRAINING.

NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION.

The society held its second annual convention in Atlanta, Ga., November 19 to 21, 1908. One of the most important features of the meeting was the preliminary report of the committee of ten previously appointed to consider the relation of industrial education to the general educational system of the country. This report was as follows:

The committee appointed to consider the relation of industrial education to the general system of education of the country is composed of members living in widely separate parts of the country. Since the appointment of the committee in the spring of 1908, it has been found practically impossible to prepare a final report. The following is therefore offered as a preliminary statement with regard to this matter.

The need for industrial training and the facts concerning our own lack of it have been so often repeated that they may be accepted. All who are acquainted with education in European nations know that in the matter of industrial training we are far behind such countries as Germany; that our apprentice system, even if materially extended, can offer industrial education to only a compara-

tive few; that there are practically no facilities for the training of the youth between the ages of 14 and 18 for industrial pursuits, and the opportunities for those who are in the trades to improve their skill by theoretical training is confined to isolated and occasional schools. It is also perfectly clear that this is an industrial age, and that the education which is to serve for a whole people must take account of vocational training.

Assuming these facts as clearly demonstrated, it is evident that two distinct groups of our population are to be considered: (1) Boys and girls between the ages of 14 and 18 who leave the grammar school and at present have no systematic opportunity for training in the industries; (2) the men and women now in the industries who desire to increase their skill and efficiency by further study. The problem of industrial training seems, therefore, so far as the schools are concerned, to be divided into practically two parts, according as it applies to one or the other of these groups.

I. THE INDUSTRIAL TRAINING OF YOUTHS.

The vast majority of children leave school at the end of the grammar-school period, a number, in fact, leaving the school before that time. Any vocational school which has to serve this great group of citizens must evidently fulfill the following conditions:

(a) Such a school must articulate at some point with the public-school system of the country, preferably with the grammar school. In other words, the grammar school must at some point of its course lead a boy or a girl naturally into a vocational school, if such schools are to be fruitful to the great mass of youth.

(b) If the grammar schools are to make this connection with vocational schools, it is clear that the grammar schools should at some part of their course do their part in developing the vocational purposes of the pupils on the basis of enlightenment concerning the advantages of skilled vocations, including the trades. It is clear, also, that every study should be so taught as to bring out its application to life, particularly to the skilled vocations, although those studies would not be so taught in the grammar school as to provide preparation for any particular trade. It is clear, too, that the grammar school should introduce elementary industrial training in some form, either in the form of manual training at the bench or at the forge or in household pursuits, wherever the training could be effectively given. Such an introduction of subjects for industrial training must come through the substitution of these subjects for something in the curriculum. The way to industrial education lies not in a more complex curriculum in existing schools, but in a larger variety of schools, each with a simpler programme and each seeking to do well the work it sets out to do.

(c) Such schools as may articulate with the grammar school for the training of youths will therefore most likely assume the form of training schools for particular industries. They will be local in their character and will seek to serve the needs of a local industry. The boy or girl trained in them will not be a skilled journeyman in any trade, but will have received a fundamental training in those things which will make him a skilled journeyman in a short time, and will at the same time prompt him to a higher form of vocational efficiency than he is likely to have had otherwise. In this respect the industrial training school for youth is likely to have much the same relation to the preparation of a skilled journeyman as the high-grade engineering school has to the preparation of a practical engineer.

II. SCHOOLS FOR THOSE ALREADY IN THE INDUSTRIES.

Experience would seem to indicate that the schools which seek to serve those already in the industries will assume one of two forms:

(a) Industrial improvement schools.

(b) Trade schools.

The industrial improvement school has so far, as it is likely to do in the future, assumed the form of an evening school in which are taught the fundamental sciences upon which a trade rests, together with such technical information as can be given in a physical, chemical, or mechanical laboratory. For example, those who are engaged in the power station of an electric railroad, as motormen, as electricians, or as linemen, may in such a school learn the fundamental theory of electricity, the methods of insulation, of electrical measurement, and of the transformation of energy. All of these principles may be illustrated before their eyes in the electrical laboratory, and they may thus acquire a foundation of knowledge which will enable them to become in time foremen, managers, or perhaps inventors. Such a school appeals only to the men of more than usual ambition and energy.

The pure trade school, on the other hand, undertakes to teach not alone the fundamental processes of a trade, but its technique. It therefore lays chief emphasis upon giving to its students such continuous practice as may bring them up to the point of expertness. It seeks to reproduce as nearly as possible the conditions of actual practice.

GENERAL CONCLUSIONS.

It seems clear to your committee that schools of all the types which have been mentioned here, both for youths and for adults, are likely to be attempted, and in fact are being attempted in the various parts of the United States. The committee believes that all these types of schools are to be welcomed as experiments in the general problem which we are seeking to solve. Success in industrial training does not depend upon the adoption of one type of school. A measure of success is likely to be achieved by all of these efforts, and in the judgment of your committee it is wise for those who have to do with industrial education to welcome during the next decade of experimentation all these forms of industrial education, whether they be in the form of a trade school for boys, an industrial improvement school for boys and adults, or a trade school for the workers of a trade. Ultimately all these efforts will, by the force of educational gravitation, relate themselves to the public-school system of the country, partly by the adaptation of the public-school system itself, partly by the adaptation of these industrial schools. No series of schools can finally survive which does not so relate itself to the public-school education, since the source from which pupils are to be drawn must in the long run be the public schools. The committee therefore feels that any of these efforts, undertaken in an intelligent, sympathetic, and proper spirit, is to be welcomed as a new contribution to the general problem of industrial education in the United States.

The officers of the society for 1909 are Alexander C. Humphreys, president; Walter C. Kerr, vice-president; Frederick B. Pratt, treasurer; James C. Monaghan, 546 Fifth avenue, New York City, secretary.

The next annual convention will be held at Milwaukee, December 1-3, 1909.

REPORT OF THE COMMITTEE ON INDUSTRIAL EDUCATION OF THE
NATIONAL ASSOCIATION OF MANUFACTURERS.

The National Association of Manufacturers held its thirteenth annual convention at New York City in May, 1908, on which occasion its committee on industrial education, Anthony Ittner, chairman, made an extended report dealing with various phases of the subject, which report was duly adopted. The committee noted with satisfaction that at no time had the progress of industrial education been so marked as during the twelve months that had intervened since making its last report. The committee, the report states, was originally brought into being to remedy the conditions prevailing at the time of its first appointment, conditions "the result of which was that in some localities a father was not even permitted to teach his own son a trade and calling in which he himself was engaged." The very positive attitude of the committee in favor of trade schools that will turn out finished journeymen mechanics may be seen from its "conclusions," which run as follows:

And now, in bringing this report to a close, we want still further to emphasize what we have iterated and reiterated in our former reports—that it is genuine, practical industrial education that we stand for, an industrial education which will make of the American boy an all-around, full-fledged, skilled mechanic, able to take his place and hold his own alongside of the skilled mechanic having learned his trade in the skilled industries of this or any other country, and to this contention let us dogmatically adhere. * * *

And while we can see the advantages that a trade-school training would be to a young man who is serving an apprenticeship in some of the industries, or to a journeyman who was working at his trade and receiving full journeyman's wages and who might desire to make of himself a more expert and finished workman, we should nevertheless oppose with all our might granting trade-school privileges to such, until every young man who was not serving an apprenticeship or working at his trade as a journeyman had been provided for. * * * The argument that a finished, skilled workman can not be graduated from a trade school must be combated with the utmost persistency, as also the admission into night trade schools of young men serving apprenticeships and journeymen working at their trades, until every young man applying for admission had been provided for. Should it then appear that there were vacancies, there should be no objection to admitting apprentices and journeymen mechanics into night trade schools.

Similar views are expressed in the report of the same committee made at the fourteenth meeting of the association, held in New York City, May 17-19, 1909, and regret is expressed that such organizations as the National Society for the Promotion of Industrial Education and the Massachusetts State Commission have not taken a more definite and determined stand in favor of complete trade schools. On the other hand, the committee highly commends the action of the National Education Association, which has cordially indorsed (1908) the establishment of public trade and industrial schools of

such a character that "the graduates of these schools may at once become advanced apprentices or journeymen."

INDUSTRIAL EDUCATION FROM THE VIEW POINT OF ORGANIZED LABOR.

The American Federation of Labor, at its twenty-ninth annual convention, held at Denver November 9-21, 1908, adopted the following resolution:

Whereas industrial education is necessary and inevitable for the progress of an industrial people; and

Whereas there are two groups with opposite methods, and seeking antagonistic ends, now advocating industrial education in the United States; and

Whereas one of these groups is largely composed of the nonunion employers of the country who advance industrial education as a special privilege under conditions that educate the student or apprentice to nonunion sympathies and prepare him as a skilled worker for scab labor and strike-breaking purposes, thus using the children of the workers against the interests of their organized fathers and brothers in the various crafts; and

Whereas this group also favors the training of the student or apprentice for skill in only one industrial process, thus making the graduate a skilled worker in only a very limited sense and rendering him entirely helpless if lack of employment comes in his single subdivision of a craft; and

Whereas the other group is composed of great educators, enlightened representatives of organized labor, and persons engaged in genuine social service, who advocate industrial education as a common right to be open to all children on equal terms to be provided by general taxation and kept under the control of the whole people with a method or system of education that will make the apprentice or graduate a skilled craftsman in all the branches of his trade; and

Whereas organized labor has the largest personal and the highest public interest in the subject of industrial education, and should enlist its ablest and best men in behalf of the best system, under conditions that will promote the interests of the workers and the general welfare: Now, therefore be it

Resolved, That the president, in conjunction with the executive council of the American Federation of Labor, be, and is hereby, authorized to appoint a special committee of at least fifteen, to be composed of a majority of trade union members of this convention, who will serve without compensation and incur no expenses other than necessary and legitimate expenditure within the judgment of the president and executive council, to investigate the methods and means of industrial education in this country and abroad, and to report its findings, conclusions, and recommendations to the next annual meeting of the American Federation of Labor.

The committee, as subsequently appointed, includes Charles P. Neill, United States Commissioner of Labor; Representative W. B. Wilson; Rev. Charles Stelzle, superintendent of the department of labor of the Presbyterian Church; Charles H. Winslow, former commissioner of industrial education, of Massachusetts; Mrs. Raymond Robins, president of the National Woman's Trade Union League; James Duncan, vice-president of the American Federation of Labor; John B. Lennon, treasurer of the American Federation of

Labor; Frank Duffy, secretary of the United Brotherhood of Carpenters; Agnes Nestor, John Golden, James Wilson, Edward Hirsch, James Roach, Hugh Frayne, D. J. Conlon, Stewart Reid, and John Mitchell, chairman.

The committee held a meeting in New York City August 20, 1909, preliminary to a general meeting which will be held in Washington October 19.

Regarding the work of this committee, the chairman, Mr. John Mitchell, is quoted by the Literary Digest as stating in his report that:

The committee has gone into the subject exhaustively, and finds that many manufacturers, because of the specialization of the different departments of the trades, find it very hard to get competent superintendents owing to the difficulty of finding all-around mechanics who have learned everything about any particular trade.

Further on he goes on to say:

The high schools, for instance, teach pupils how to prepare for the professions, but as there are more people in mechanical trades than in the professions, they should also, we believe, teach the principles of mechanics.

A man, for instance, may know that a joint at a certain angle is stronger than at any other angle, without knowing the reason why. Another man will know why that joint is stronger. This man will be more valuable than the first man. Ambition to excel would be stimulated if mechanics had a better opportunity of knowing the principles of a trade, as well as learning one branch of a trade in a routine way. In the end this would be better for both employers and employees.

A number of recommendations on the subject will be made at the coming meeting of the committee in Washington, which will be submitted at the next meeting of the American Federation of Labor for approval before we ask for legislation on the subject.

The attitude of organized labor toward industrial education has been also set forth in an address by Mr. John Golden, general president of the United Textile Workers of America, delivered before the American Institute of Instruction, July, 1909. In the course of his remarks he said:

Organized labor, however, is strongly opposed to some forms of industrial education, namely, that represented by the "trade school," that guarantees to turn out a young man in a few months' time as a full-fledged tradesman. The results of such schools have been to flood the labor market with "half-baked" journeymen, to put a premium on securing the job, instead of a premium on the skill necessary to do the job; and, what is worse still, these kinds of schools have on some occasions supplied strike breakers when union men have been endeavoring to secure that which they felt they were justly entitled to. And let me ask you, why should not the union craftsman jealously guard the only asset he has in the world against those who would not hesitate a moment to depreciate its value? It is the only means he has to maintain his home and provide for those dependent upon him. If he is somewhat slow in taking up with these new movements, it is because of what he has endured in the past, and because of the fact that he wants to make sure that those whom he loves are not going to suffer.

Organized labor realizes just as keenly as anybody else that this movement in the interest of industrial education is not a fad, but a stern reality and an absolute necessity. If this country is to preserve and maintain its industrial supremacy, men and women in all walks of life, irrespective of their station, must join hands together in one united effort. * * * I believe the question as to the need of such education has passed beyond the debating stage; what is now needed more than anything else is for all classes to get together and cooperate in this great movement, which is not a question of capital and labor any more than it is a subject to exploit our fads and fancies. I believe we should get right hold of the boy at 14, when his mind is becoming impressionable, when he is just beginning to feel his wants to do something tangible; teach him the why and the wherefore of certain things and the very best way to do them.

DIVISION OF TRADE SCHOOLS OF NEW YORK STATE DEPARTMENT OF EDUCATION.

The New York State department of education has organized a division of trades schools, with Mr. Arthur D. Dean as chief of the division, and is prepared to take up the organization of factory and trades schools with local school authorities, commercial or labor organizations, or any other citizens who may be interested.

INAUGURATION OF PUBLIC VOCATIONAL TRAINING IN NEW YORK CITY.

On September 13, 1909, will be opened in New York the first public vocational or industrial school established in conformity with the recommendation of the city school board committee on trade schools. Charles J. Pickett, Ph. D., has been appointed principal of the school, which will be known as "Public School 100." There will be 25 men teachers, chosen on account of their mechanical skill, among other qualifications. Regarding the general character of the school, the New York Tribune said (Aug. 30), in the course of an extended article upon the subject:

Various equipments of the best quality and design are rapidly being installed in the handsome new building for the use of those boys who enter the course. In wood the pupils will learn carpentry, joinery, wood turning, pattern making, and the manipulation of milling machinery. In metal they will have forge work, sheet-metal work, and a complete line of machine-shop work. There will also be courses in plumbing, printing, architectural and mechanical drafting, including the making of plans and the drawing up of specifications and blue-prints.

The nonvocational subjects that will occupy less than one-fourth of the student's time will include trade mathematics, elementary bookkeeping, industrial history, civics, industrial and commercial geography, and English. "Every topic that is introduced," said Doctor Pickett, "will be tested in terms of its efficiency as a correlative of the vocational subjects." The hours will be from 9 a. m. to 5 p. m. The atmosphere of the school will be the atmosphere of the shops. The boys are to be led to feel that they are working in an environment

closely approximating that of a well-conducted shop. This will mean a radical breaking away from ordinary school methods and conditions.

The instruction will be mainly individual; "mass work" will have no place in this new venture, and no pupil will be compelled to mark time, it is said, because of the inability of his fellows to keep pace with him. Doctor Pickett described the difference between the aim of the manual-training schools and the new vocational school as follows:

"The manual training is not to give a boy mastery of tools; it is simply an added appeal in the line of general culture. The vocational teaching idea aims specifically to give mastery of tools."

The object of the school, according to Superintendent Maxwell, as set forth in his tenth annual report (p. 126), is this:

The board of education does not propose to turn out "half-baked" journeymen to compete with union labor. What it proposes to do is to fit boys and girls more completely than they are fitted at present to commence learning any trade requiring skill of hand.

Two things necessary for success seem to him to be: (1) The employment of skilled workmen in our manual training and industrial processes. The boy gains respect for hand labor only when he has a master workman to imitate. (2) Some means must be found to secure the active participation of manufacturers and trades unions in our industrial work.

The latter is to be accomplished through the organization of committees to advise the educational authorities, and through a provision by which boys and girls between 14 and 16 at work might spend part of their working day in school.

Doctor Pickett also says:

I don't plan to turn out boys who are going to take journeymen jobs.

CONSOLIDATION OF INDUSTRIAL AND GENERAL EDUCATION IN MASSACHUSETTS.

According to the terms of a Massachusetts act of 1909, the state board of education and the state commission on industrial education have been consolidated. The new state board of education so formed, consisting of nine members, is to exercise all the powers formerly conferred on both bodies. Prof. Paul H. Hanus, of Harvard, chairman of the commission on industrial education from 1906 to 1909, has been nominated a member of the new board. In addition to appointing a state commissioner of education, the board is to appoint two deputy commissioners, "one of whom shall be especially qualified to deal with industrial education."

HIGH SCHOOL INDUSTRIAL COURSES IN CHICOPEE AND FITCHBURG, MASS.

The city of Chicopee has recently inaugurated a noteworthy experiment in the field of public industrial education, which is thus

described by Mr. Julius E. Warren, agent of the state board of education:

The Chicopee high school in the morning session gives to those who choose to take the industrial work special courses in mathematics, drawing, science, English, history, the study of materials used, processes of manufacture, transportation, and the economic, civic, and social questions involved in production. In the afternoon these pupils work in a well-equipped shop connected with the high-school building. Provision has been made for the teaching of pattern making, woodworking, molding, and the machinist's trade. The girls have excellent courses in the domestic arts. All of the instruction is given by skilled mechanics or highly trained teachers.

Another city of Massachusetts, Fitchburg, has adopted for its high-school pupils the system of cooperative instruction described elsewhere in this chapter.

MANUAL ARTS SCHOOL IN FITCHBURG, MASS.

Supt. Joseph G. Edgerly, of Fitchburg, Mass., informs the Commissioner of Education, September 20, 1909, that a manual arts school has been opened in that city on what appears to be a unique plan. The State made an appropriation for a building for the school, which building is to be a part of the state normal school plant. The city will maintain the school, which is now being conducted in temporary quarters. Pupils from grades 7 and 8 are admitted to the school from any part of the city; they will accordingly have an opportunity to pursue the course of the school, while the students at the state normal school will have opportunity to learn how to teach the various branches of the course. The building is in process of erection and will probably be completed in December. Much is expected of this movement.

INDUSTRIAL EDUCATION IN NEW BEDFORD.

A system of free evening industrial courses was conducted in New Bedford, Mass., during the school year 1908-9, under the authority of the city school board. Courses were given in electricity, steam, mathematics, domestic economy, chemistry, gas engines, etc. An advisory board included a number of citizens connected with the local industries. These courses were designed for persons already engaged in some form of occupation, no pupils connected with the elementary or high schools being as a rule admitted. The sessions extended from 7.30 to 9.30 p. m., and any number of courses might be taken by a pupil, provided they did not come on the same night. The number of students in the various courses was 237.

In October, 1908, the New Bedford city council passed an order establishing an independent industrial school. Charles R. Allen was elected principal, at a salary of \$3,000. Active work was expected to begin in the ensuing September.

NEW INDUSTRIAL SCHOOL AT SPRINGFIELD, MASS.

A new industrial or vocational public school was started in Springfield, Mass., in September, 1909, inaugurating a new era in education in that city. The vocational work will be begun in two centers, and preparations are being made for about 60 boys, 30 in each place. Boys from 14 years of age and upward, those who have completed the work of the seventh and eighth grades, and who but for the institution of the vocational school would drop their education for good, will attend the school. All of the work done at the school will be book work, these sessions coming from 9 to 12 o'clock in the morning. In the afternoon the same classes will take their shopwork from 2 to 5 o'clock. There will be shopwork also Saturday mornings. The book work will center largely about the shops, having to do with the economic and industrial conditions of the country, descriptions of the machinery used, etc. The local vocational school will not fit boys for finished trade workmen, as they will have to serve apprenticeships in factories after attending the school. Each boy with the help of the instructors will try to discover which work he is best fitted for, wood or iron. (Abridged from the Springfield Republican.)

THE MILWAUKEE SCHOOL OF TRADES—THE WISCONSIN LAW.

The Milwaukee School of Trades, opened in January, 1906, under the auspices of the Merchants and Manufacturers' Association, was incorporated into the public-school system in 1907. The school is in operation fifty-two weeks in the year and forty-four hours a week. Day courses are given in pattern making, machinist's and tool-making trade, and carpentry and woodworking (two years), and plumbing and gas fitting (one year). Night classes are in session two hours four evenings a week during seven months of the year. Each pupil makes a study of a single trade. Tuition is free to pupils from 16 to 20 years of age who can read and write and have a knowledge of the elements of arithmetic. Graduates of the eighth grade are preferred. The instruction in each trade comes under five heads: (1) Shop practice and trade lectures; (2) mechanical and free-hand working drawing; (3) workshop mathematics; (4) lectures and illustrated talks on subjects pertaining to the trade; (5) shop-inspection trips. About three-fourths of the student's time is devoted to the actual shop practice coming under the first of the above heads. Each boy is a class by himself, and may finish his course in less than the prescribed time.

The school does not claim to turn out journeymen mechanics. Its aim is to instruct its students thoroughly, in as short a time as possible, in all the fundamental principles and in the practice of the trade in

question, so that they may upon graduation possess ability and confidence and be of immediate practical value to their employers and receive a fair remuneration at once.

The most urgent problem, according to Mr. Charles F. Perry, the director of the Milwaukee school, is what to do with the boy between graduation from the grammar school and his admission to the trade school. He suggests the introduction into the high schools of trade-school preparatory courses.

The Wisconsin trade-school law took effect July 1, 1907. It authorized any city to establish, as a part of the public-school system, a school or schools for the purpose of giving practical instruction in the useful trades to persons of 16 years and upward. Such a school is not to be maintained, however, unless there is an average enrollment of at least 30. In 1909 the law was amended to include trade schools for girls, and the age limit for admission was lowered to 14 years.

State Superintendent C. P. Cary states, July, 1909, that "no other city besides Milwaukee has made provision for the establishment of trade schools."

TRADE EDUCATION IN THE PUBLIC SCHOOLS OF MENOMONIE, WIS.

Boys in the last two years of the Menomonie high schools are permitted to take work in a particular trade in place of the regular manual-training course. This has proved an incentive to boys to continue their education through the high school, as in the last two years all but two of the boys graduating from the eighth grade entered the high school. Supt. George A. Works, of the Menomonie schools, writes (July 31, 1909) that the work is still being continued:

The trades offered at present are machine shop, drafting, plumbing, and brick-laying. The last two named have been in progress only a year, so not much can be said with reference to them. In fact, all the trade work has been in operation such a short space of time that it is somewhat early to draw inferences that may be considered final. I am of the opinion that the earning capacity of our students leaving school has been increased by this work.

NEW JERSEY COMMISSION ON INDUSTRIAL EDUCATION.

Pursuant to a joint resolution of the senate and general assembly of New Jersey approved April 14, 1908, the governor of the State appointed the following commission on industrial education: George R. Howe, president; William A. Bembridge, John W. Ferguson, F. W. Roebeling, jr., and George G. Tennant. The commission was organized June 2, 1908, and its report was submitted to the legislature in January, 1909. The report as printed contains 177 pages, and is an excellent survey of industrial educational work in the country.

The commission summarizes the results of its investigations as follows:

(1) As the direct outcome of modern industrial conditions—factory organization, the introduction of machinery, and “piecework”—the apprenticeship system has been virtually abandoned as a means of instructing the young in the various trades.

(2) There is, a lack of skilled and efficient workmen, and this will be largely increased unless a better means of vocational training is found.

(3) Although the compulsory-attendance period in the public schools has been extended gradually in New Jersey, as elsewhere in the United States, the schools have not been able to offer vocational training. Fully 95 per cent of the pupils leave school between the ages of 14 and 17, and without having formed any idea as to what trade or vocation they should follow. In consequence they drift into occupations, rather than select those which might be most nearly suited to their aptitudes, and their progress is generally arrested at an early age because of the restricted character of their experience and the failure to receive supplementary instruction.

(4) The trades have become so specialized that there is but little chance for a learner to go beyond the narrow limits of the work to which he is assigned unless he has supplementary training.

(5) The workers, mechanics, or craftsmen in the several trades are deeply sensible of their lack of opportunities for vocational training during the early years, and grown men among them would gladly take advantage of industrial schools if these institutions were established.

(6) Although business conditions are such that the employers, in most instances, have neither the time nor the inclination to conduct vocational schools within the factories, they would gladly welcome any suitable means of providing the workers with the instruction which the latter require.

(7) There is an urgent demand for facilities for industrial education to supplement the training of the shops.

The following recommendations were made:

(1) That manual training should be encouraged, especially through the compulsory-attendance period.

(2) That vocational instruction should be provided for those who have completed the compulsory-attendance period and who plan to enter some industrial pursuit at a later time.

(3) That evening industrial schools should be established for those who leave the ordinary school early in life to go to work.

(4) That a permanent state commission should be established to exercise control over industrial education through local boards of trustees appointed independently of the present boards of education, these boards to have full charge and control of the local industrial schools, subject only to the supervision of the state commission.

STATE AID TO MANUAL TRAINING IN VERMONT.

An act of the legislature of Vermont approved January 27, 1909, provides for the payment of \$250 per year to any town, city, or district maintaining a manual training department in a high or grammar school whose course of study in manual training has been ap-

proved by the state superintendent of education. The amount to be expended under the act shall not exceed \$5,000 in any one year.

THE CLEVELAND TECHNICAL HIGH SCHOOL.

The Cleveland Technical High School, Cleveland, Ohio, was opened for instruction in the fall of 1908, and is intended to be a finishing school whose graduates will leave school prepared to enter a vocation. It offers a course of study for boys and a course for girls. The school year is divided into four quarters of twelve weeks each, and may be completed in either three or four years at the option of the pupils. During the last two years of the course pupils will be allowed to specialize along lines to which they are particularly adapted, in order that upon graduation they may be better fitted for their life work. The department for girls has domestic science and domestic and industrial art for its basis. The school offers trade courses during the evening to men and women already engaged in a given trade. The trade instruction offered to men in the evening includes carpentry, cabinet making, pattern making, foundry practice, tool forging, sheet metal and machine shop practice, architectural and mechanical drawing, free-hand drawing, charcoal and water-color rendering, clay modeling, bookbinding, leather work, art metal work and design as applied to the crafts. For women there will be courses in plain hand sewing, dress cutting and fitting, machine sewing, spring and fall millinery, plain cooking, etc. A new three story and basement building has been erected, for the construction of which bonds to the amount of \$350,000 were issued.

Respecting the enrollment in this school, Superintendent Elson says that—

while it enrolls something like 600 students, more than 500 of these were largely from waste product, that is to say, they are pupils who would not have gone to high school had not this school been opened to them.

THE SECONDARY INDUSTRIAL SCHOOL OF COLUMBUS, GA.

This school, which forms a part of the public-school system of Columbus, possesses some notable features. It may be described as an academic trade and commercial high school, in which, besides the usual branches of a high-school education (omitting foreign languages, however), are taught a number of trades having reference to the dominant local industries. The session of this school continues throughout the year, except the month of August. The hours of the school are the ordinary working hours, from 8 to 4, with thirty minutes' intermission, for six days in the week, the traditional Saturday holiday being eliminated. Besides the academic work, the boys are taught carpentry, pattern making, machinist's trade, cotton-mill

work, and business pursuits; the girls, millinery, dressmaking, etc. Each of these courses extends over three full years, and requires from twenty-four to thirty hours a week in addition to academic work. The pupil on entering must be 14 years of age and have had an elementary school education, and is required to select then the trade to which he is to devote himself throughout the course.

The frequent change from academic studies to practical shopwork and other exercises relieves the strain upon the mind, so that the long school hours and almost uninterrupted session are said not to be prejudicial to the health of the pupils; rather, the pleasing variety of occupation holds their interest and leads to a wholesome and sympathetic activity.

Mr. C. B. Gibson, city school superintendent, makes the following statement regarding this school under date of July 10, 1909:

In the preparation of students for intelligent and efficient service in industrial pursuits the school is successfully fulfilling its purpose. So far I have not been able to discover any but the friendliest attitude toward the school on the part of labor unions.

The increase in enrollment of students is not as rapid as I had hoped it would be, due almost entirely to its departure from the long-established and widely prevailing custom of short hours and long vacations. To educate the public upon the importance of economizing in time in the life of a youth, especially when other local schools maintain the traditional hours and annual sessions, will be a slow process.

THE DAVID RANKEN JUNIOR SCHOOL OF MECHANICAL TRADES, ST. LOUIS.

The David Ranken Junior School of Mechanical Trades is an endowed institution, founded by Mr. David Ranken, jr., of St. Louis, to be opened in September, 1909. According to a preliminary announcement, the design of the school is to train and fit boys and men for the mechanical or manual trades and occupations.

Mr. Ranken stipulates that the instruction to be given must always be practical—

having in mind the need of the community and the State for practical workers in mechanical trades who shall be skilled in their respective trades and occupations and have such education as will best fit them to serve the community and the State in such occupations.

Classes will be held both day and evening. For the first year, and perhaps longer, the instruction offered in the day classes will be limited to four trades: Carpentry, bricklaying, plumbing, and painting. In all cases the instructors will be men of practical experience and skill in their trades, fully competent to teach the best modern methods and theory. The scheme of operation provides for extensive practice in the manual and mechanical operations involved in the

trades offered, and, in addition thereto, instruction in drawing, mathematics, elementary science, and building theory.

The regular course will be open to men and boys of 16 or over who have completed the work of the seventh grade in the public schools, or its equivalent. Applicants who have had experience in a trade may be admitted with less schooling. No set time can be given for the completion of any one of the courses offered. The average student should be able to complete the work offered in any of the given trades in two years. The school year will run from September to August. Classes will be in session from 8 to 5 o'clock, from Monday to Friday, inclusive, and from 8 to 12 on Saturday.

The present building, the first of a group, is three stories high, contains five shops, a drafting room, an assembly hall, a science room, a library, class rooms, and offices, and will be fully equipped with the best modern tools and appliances necessary for thorough instruction in the trades.

Mr. Lewis Gustafson has been chosen for superintendent.

ELEMENTARY INDUSTRIAL SCHOOL AT CLEVELAND, OHIO.

The board of education of Cleveland, Ohio, has authorized the establishment, at the Brownell Annex, of an elementary industrial school for boys and girls who are more than 13 years old and not below the sixth grade. The course extends through two years and consists of two types of work, namely, (*a*) academic, (*b*) industrial, the time being equally divided between the two. The academic studies comprise English, arithmetic, and geography-history. The English includes spelling, writing, reading, literature, composition; the arithmetic includes accounts and shop problems; the geography-history deals with the industrial, commercial, and political phases of the subject, and will include civics and municipal studies.

On the industrial side the work will include, for boys, bench work in wood and sheet metal, free-hand drawing and design, mechanical drawing; for girls, sewing and garment making, cooking, and household arts, free-hand drawing, design, and construction. Throughout the work will be intensely practical.

The day consists of nine periods, one of which is devoted to luncheon. The school accommodates 80 boys and 80 girls. It is intended for boys and girls to whom the regular course is unduly literary and who are not especially interested in bookish things. It is also of interest to those whose economic condition requires them to leave school early to become wage-earners.

An auditorium, gymnasium, shower bath, and swimming pool are available for the use of this special school. It is open to available pupils from all parts of the city. Each school building may name eligible boys and girls, naming a first choice and an alternate. If

possible, when a delegate named is a boy, or boys, the alternate should be a girl, or girls, and when the delegates are girls the alternates should be boys.

WINONA TECHNICAL INSTITUTE, INDIANAPOLIS.

The Winona Technical Institute, Indianapolis, Ind., is a group of trade schools. It was opened in 1904 with courses in pharmacy-chemistry and electrical wiring, but courses in the additional subjects of lithography, printing, tile and mantel setting, bricklaying, and foundry work are now offered. These courses vary in length from a few months to two years, depending upon the trade learned. Literary instruction is subordinate to practical mechanical work. The history of industry, chemistry, and other subjects kindred to the chosen trade of the apprentice are studied.

The school of lithography, the only one of its kind in the country, offers practical work in every branch of the trade. The chemistry of the subject is taught. Thus pupils are trained not only to produce the effect but to know the cause. Similarly, instruction in the other trades is made comprehensive.

Recently, by an agreement between the institute and the International Stewards' Association, a hotel employees' training school has been planned. The Stewards' Association will build a hotel on the ground capable of accommodating 400 students, and practical instruction in hotel work will be given.

Tuition rates are reasonable. A number of scholarships are offered, so that the way to a remunerative trade is made comparatively easy for the deserving, energetic boy.

THE WILLIAMSON FREE SCHOOL OF MECHANICAL TRADES.

The Williamson school is a private endowed school, turning out skilled mechanics. Since 1891 it has graduated 726 pupils, as follows: One hundred and seventy bricklayers, 150 carpenters, 69 stationary engineers, 198 machinists, and 139 pattern makers. Its property consists of 24 buildings, located on 230 acres of ground, near Philadelphia.

No pupils are received who are under 16 or over 18 years of age. The number of candidates for admission largely exceeds the capacity of the school. Candidates are required to pass scholastic, moral, and physical entrance examinations. The scholastic examination is in the common school branches. Candidates who prove satisfactory after a preliminary trial are indentured for a term of three years. Each apprentice takes but one of the five trades above mentioned. None are admitted but young men who intend following for a livelihood the trades taught them.

The institution is open all the year, but regular exercises are suspended in August. The school is in session eight hours daily on five days of the week, and three hours on Saturday, each apprentice spending about one-half of the time in the shops during the first year, the proportion increasing until the last few months of the senior year, when shopwork occupies the entire day.

The branches taught in the academic department are reading, writing, grammar, arithmetic, algebra, geometry, trigonometry, physical and political geography, United States history, English literature, physical science, physiology and hygiene, civil government, chemistry, elementary vocal music, theory of the steam engine, strength of materials, building construction, mechanical and free-hand drawing, and estimating.

The school was founded in the belief that if intelligent young men are given carefully graded and comprehensive exercises in trade work in properly equipped school shops by competent teachers who are high-grade mechanics, with suitable accompanying academic instruction (especially in mathematics and mechanical drawing) and a course of sufficient length, they will surely become skilled workmen.

How far this belief has been justified by the results is shown in the following statement recently made to the bureau by Mr. John M. Shrigley, the president of the school:

The experience of the Williamson Free School of Mechanical Trades, covering a period of nearly eighteen years, and the graduation of a large number of mechanics in the trades of bricklaying, carpentering, stationary engineering, machine work, and pattern making, has clearly shown the practicability of its methods. The large demand for its graduates year after year by the leading employers of the country shows unmistakably the thoroughness of the mechanical instruction given at the school, as well as the favorable results of the collateral academic courses, and the foundation laid for good citizenship. They are employed immediately on graduation as journeymen at journeymen's wages, and have proven themselves to be skillful and intelligent workmen and already many of them have attained to positions of important mechanical responsibility. They make notably good foremen, and there has arisen a considerable demand for them as teachers of trade work in their lines.

Ninety-five per cent of the graduates are said to enter at once on trade work at wages of 60 to 100 per cent of full journeyman's pay.

LUDLOW (MASS.) TEXTILE SCHOOL.

At the Ludlow Textile School, Ludlow, Mass., which was established and is maintained by the Ludlow Manufacturing Associates, there is very close and intimate relationship between the school and the mills. Admission to the school is limited to the most intelligent boys between 14 and 16 years of age. They spend five hours each day in the mills and three hours each day in the school, receiving payment as if they worked the full eight hours in the mills. Each

apprentice spends from three to six months in each department of the mills and his work varies but little from that of the regular mill workers. The course of study in the school extends through four years and includes arithmetic, algebra, geometry, English, geography, history, drawing, and mechanics. There is a vacation of one month in August.

COOPERATIVE INDUSTRIAL COURSES.

What promises to be one of the most significant movements in industrial education in recent years is the establishment of cooperative courses, consisting of a combination of instruction in school and practical shopwork in a factory. By an agreement between the school authorities and the manufacturer, the student is enabled to divide his time between technical class-room instruction and practical training as an apprentice. Following is a somewhat detailed account of the work of certain institutions that offer such courses:

THE UNIVERSITY OF CINCINNATI, CINCINNATI, OHIO.

The cooperative courses of the University of Cincinnati are designed for students in engineering, but no cooperative course in civil engineering is given. By a contract signed by the student, the university, and the firm, the student enters upon a period of study and shopwork for six years. A class is divided into two sections; these sections alternate with each other, each one working one week in the factory and studying the next week in the university. During the summer full-time work is done in the shops, but several weeks of vacation are given within the year. Conferences are held between the manufacturer and the dean of the engineering college and the professor of electrical, mechanical, or chemical engineering, as the case may be, in order that the technical instruction and the practical training may be properly correlated and the needs of the student be met. In the factory the student follows the course of the machine being constructed, from the raw material to the finished product ready to be sold. Work is begun in the shop about July 1 of the summer preceding the opening of the college session. The entrance requirements for these courses are the same as for the ordinary four-year course.

A student is paid for the shopwork done an amount sufficient to cover a considerable portion of his necessary expenses. For the first period of approximately nine hundred and ninety hours he is paid 10 cents per hour. After that an increase of 1 cent per hour for each period is made until the twelfth period is reached, when 21 cents per hour is paid.

The university expenses for tuition and laboratory fees are about as follows: For the first year, \$90; second year, \$80; third year, \$65; fourth year, \$65; fifth year, \$65; sixth year, \$65.

The university cooperates with railroads, bridge and structural steel firms, reenforced concrete companies, and general contractors.

Mr. E. F. DuBrul, a member of the board of directors of the university, has been largely instrumental in introducing and perfecting the cooperative courses of that institution. The following remarks of his regarding their practical operation were made at the Thirteenth Annual Convention of the National Association of Manufacturers (1908):

The cooperative course in the University of Cincinnati * * * has been so successful in the last two years during which it has been operating that we have at least seven or eight schools that are now working at plans in the cooperative line as to training mechanics in different branches. They do not propose to give any seven and a half hours a week for two years and expect to make a mechanic, as our friends do up in Menominee. We do not believe they can do it. * * *

There are just two difficulties about it. One difficulty is a cooperation of the school with the shop and the other the cooperation of the shop with the school. Some shopmen thought we were going to get a lot of kid-glove apprentices, and some professors thought we were going to get tobacco-chewing students. The foremen found that they got the best apprentices they ever had and the professors found they got the best students they ever had. The influence of the university is working on down to the high schools. More boys are going to the Cincinnati high schools with the idea of taking a technical education along those lines. We have over 2,000 applications to our university to enter this course, where they learn the trade, not as the schools of engineering have been doing, puddling around for a few hours a week in a play shop, but where they sign for six years. During those six years they get just as many hours of apprenticeship at the trade as any other apprentice gets. They get the same sort of treatment that any other apprentice gets—no better and no worse. * * *

Now, the same principle is applicable to the lower grade of industrial training as well as it is to the higher grade. It is applicable in almost any kind of a manufacturing industry. It may be applicable in constructive industries, building, and so on. We do not know, as we have not tried that, but we have tried it in all sorts of manufacturing industries as far as the higher training goes, and we believe, going from the one premise to the other, that it is going to be applicable all the way through.

It is an economical system. When it was shown to us that it would save all the expense of equipment that is necessary in a school shop and that it costs so very, very little after you have put it in, the board was very anxious to try the plan. And, as I say, we are more than delighted, and our students are more than delighted. This great saving can be made in the matter of equipment in any other line of business or in any other sort of school. * * * It is curious, but it is a fact, that our boys are doing more intellectual work in half the time at the university than the other students in the regular classes are doing in their full time. They have gone through the same examinations, they have taken the same class work, and they have passed with 25 per cent better grades. * * *

We propose to extend our system on down through the high schools, and our high schools, as I say, are asking that it be established. * * *

The Bell Telephone Company proposes to make our university its training school and will take on from 10 to 15 students per year. These will be the brightest young men to be found by the various Bell managers in their respective towns.

Dean Herman Schneider, of the college of engineering in the university, writes (July, 1909) that many changes are being made in the university end of the cooperative courses. It is intended to operate the engineering college hereafter eleven months in the year, on the alternate week basis, for the course of six years.

During this half-time work [he says] we shall give as much technical and cultural instruction as is given in the usual five-year regular course. This will seem astonishing, but a computation of the number of weeks of actual instruction our men will receive as compared with that received by the five-year regular men eight months in the year will show that we are not far wrong. There must also be subtracted the shopwork given in the usual "regular" instruction, likewise a lot of the so-called technical courses, which are mere descriptions of technical processes, all of which our student learns in the commercial shops of Cincinnati during his regular apprenticeship. Moreover, the course through the shop is as carefully scheduled and looked after by the university authorities as the course through the university. We are introducing this year shop coordinators, whose function will be to coordinate weekly the practice at the shops with the theory at the university.

Dean Schneider states in another connection that a cooperative course has been devised for a department store and is about to be put in operation.

LEWIS INSTITUTE, CHICAGO, ILL.

A plan modeled after that of the University of Cincinnati but partaking more of the nature of secondary instruction, has been worked out by the Lewis Institute, and was put into effect at the opening of the winter quarter of 1908-9. The course covers a period of two years, and is open to approved students of from 16 to 20 years of age. Here, as at Cincinnati, a class is divided into two sections, which alternate with each other in class and shop from week to week. The institute gives instruction eight hours a day for five days in a week in subjects kindred to the chosen trade of the student. Saturdays and the summer months are devoted entirely to shopwork, but two weeks of vacation and rest from study are allowed.

About 20 metal-trade manufacturing establishments of Chicago have taken advantage of the opportunity offered by this plan, and 40 boys have been selected for apprenticeship.

The manufacturer pays a tuition fee of \$50 a year for each student, and pays the student \$5 a week for every week he works in the shop. Thus the cost to the employer, including tuition fee, is \$180 a year for each boy employed.

FITCHBURG HIGH SCHOOL, FITCHBURG, MASS.

In this case a cooperative industrial course has been introduced in a public high school. The course is of four years' duration, but the first year is devoted wholly to literary studies. At the beginning of the second year any boy may, with the consent of his parents, elect the cooperative course. At the Fitchburg school, as in the case of the other two institutions considered, the class-room instruction and the work in a factory alternate with each other, a week at a time being devoted to each. A two-months' trial period begins on the 1st of July preceding the beginning of the course of study in the school. For the session of 1908-9 20 boys were enrolled.

The scale of wages paid the apprentice for shopwork in each period of about one thousand six hundred and fifty hours is as follows: For the first period, 10 cents per hour; for the second period, 11 cents; for the third period, 12½ cents. No tuition fee is charged the student in school.

Of the success of the plan thus far Supt. Joseph G. Edgerly writes:

The manufacturers have expressed great satisfaction with the plan, some of them having expressed the opinion at this early day that these boys are superior to those formerly employed. They are boys who have their eyes and ears open, who think and ask questions of an intelligent nature. * * * With the course mapped out, it is expected that a thinking, progressive mechanic will be secured—one who will be able to reason things out for himself, and thereby to derive for himself the greatest advantage that can be attained in his life work.

This plan is carried out without any expense to the city of Fitchburg. No special buildings or equipment are required, such as would be necessary in the case of a regular trade school. The boys work in real shops under actual business conditions, and the pay they get enables many to learn a trade and at the same time continue their education up through the high school.

The Fitchburg News devoted a recent issue (June 17, 1909) largely to the results of an investigation of the cooperative system as carried out in the high school of that place. In the course of an editorial summing up of conditions the paper said in substance:

Early last year Professor Schneider explained his new system to a company of manufacturers in New York City, at a meeting attended by several men from the city of Fitchburg. These manufacturers came home, agitated the plan, and secured the interest of the local school board so that the same system was finally put in operation here last September. Results have more than justified this course. The most earnest enthusiast has seen his prophecies come true. It is a fact worthy of note that both the superintendent of schools and the manufacturers whom we quote in our news story to-day, and who now indorse the system unreservedly, were among the skeptics at the beginning of the year.

For the first time, too, we learn what the boys think of the plan, and they are the ones most closely concerned and affected by it. Their replies are all in its favor, and there can be no doubt as to its success and practicability.

Freeport, Ill., is reported to have also adopted a cooperative plan whereby high school students may work half time in factories.

COOPERATIVE COURSE IN SHOE MANUFACTURING, AT BEVERLY, MASS.

Beverly's industrial school, planned along new lines, was opened yesterday for the first time with a registration of 42 students.

Practical work was carried on at the model shop at the plant of the United Shoe Machinery Company, at Elliott street, where an equipment costing \$35,000 has been installed by the company. The line of machinery embraces machines and tools that are found in the best equipped machine shops in the country. The shop is on the third floor of building B, with plenty of light and with every convenience. While one division is working at the machine shop the other division is taking up the theoretical work at the high school. The divisions will spend alternate weeks at the shop and at the school through the year.

The school is the result of the investigation by a special commission, of which George H. Vose, assistant superintendent of the shoe machinery company, was chairman.

The shoe machinery company offered to fit up a shop at its plant at Ryal Side, and this made the school possible. The city appropriated \$1,800, which will pay for the instruction, and the State, it is expected, will make an equal appropriation. The company will pay an agreed price for the finished product, will furnish the materials at cost, and has made other concessions.

The theoretical work includes mathematics, mechanics, chemistry of materials used in the factory, free-hand sketching, blueprint reading, mechanical drawing, English, civics, and industrial economics. The shopwork will bring the boys in touch with the spirit of the big factory. The combination of school and shop work will be one which will be watched closely throughout the country. There are two practical instructors, skilled machinists. The school is in charge of a board of trustees, of which Mayor Trowt is chairman. (Boston Herald, Aug. 3, 1909.)

METROPOLITAN STREET RAILWAY COMPANY'S TRAINING SCHOOL,
NEW YORK.

The following circular was issued by Oren Root, general manager for the receivers of the Metropolitan Street Railway Company, under date of May 15, 1909:

To young men desiring to enter a street railway training school:

It is my intention to establish a practical training school for young men, particularly graduates of high school, manual training schools, colleges, or

universities, who have had more or less technical training and who intend to enter upon the vocation of operating street railroads.

It is the aim to make the conditions advantageous to the young man who has an inclination to enter upon work of this character, but who, from lack of knowledge of practical conditions, does not feel able to make a definite decision. Such a man, under the proposed plan, will be afforded an opportunity of acquainting himself with the details of this work, while at the same time receiving a salary which, with strict economy, will enable him to be self-supporting. He may thus determine for himself whether he is fitted and has a liking for employment of this character; on the other hand, the Metropolitan Street Railway Company will profit by the experiment in that it will be possible to test the capacity, ability, and adaptability of applicants, who will constitute a body of candidates from whom men may be chosen when it becomes necessary to fill vacancies in the regular operating staff.

During the first year, the student will be paid at the rate of \$15 per week. In order to give him a general idea of the railroad system, he will be assigned to duty in the maintenance of way, the electrical, the equipment, and the transportation departments, spending three months in each department. [Here follow the details of the different lines of duty in each department.]

It is expected that the membership in this school will be limited to approximately eight men at any one time, thus involving an assignment of two such men to each of the departments above mentioned during each three months' period, but the employment of students under such conditions will in no way constitute a guaranty that they will be continued in the service unless they are found to perform their duties in a satisfactory manner. On the other hand, they will be dropped if they prove incompetent; but if they complete the first year of apprenticeship, they will be definitely assigned to that department for the performance of the duties of which they have manifested the greatest ability, and dating from the time of such appointment they will be paid at the rate of \$20 per week.

After they have been so employed for one year, or, in other words, after the expiration of their second year's service with the company, if there are any vacancies in the permanent staff of the company, these men will be given permanent positions; but if not they will be awarded a certificate of service, stating the character of the work which they have performed and containing such recommendation as they may be entitled to receive.

It should be distinctly understood by those men who think they would like to take advantage of the opportunity thus afforded that the tasks which they will be called upon to perform will often involve night and Sunday work, as the street cars in New York City are operated twenty-four hours a day during the entire year. It is not recommended that any man should apply for such a position as above described unless he is strong physically and is prepared to perform hard work.

In considering applications, preference will be given to those men who have received a technical education, including such courses as electrical or mechanical engineering, as a knowledge of such subjects will be of material advantage to the student. The lack of such a training, however, will not preclude the consideration of an application, nor will it necessarily militate against the success of the student in departments of the company where this technical training is not indispensable. Applications will be received from men who have been out of school or college for several years, as well as from men who are to be graduated this year. * * *

FRANKLIN UNION, BOSTON, MASS.

At his death Benjamin Franklin left to his native city of Boston £1,000, which was to be loaned at 5 per cent interest per annum to aid young printers in starting business. At the end of one hundred years the accrued amount was to be divided, a portion being continued at interest for a second century, and a portion being expended in "public works which may be judged of most general utility to the inhabitants, such as fortifications, bridges, aqueducts, public buildings, pavements, or whatever may make life in the town more convenient to its people and render it more agreeable to strangers resorting thither for health or temporary residence."

The fund thus created became available in 1891, but litigation was necessary in order to secure a construction of Franklin's will by the courts. Accordingly, the supreme court was asked to construe the will, which resulted in the appointment of a board of managers consisting of twelve citizens. It was decided by the board to establish an industrial school, and the fund of approximately \$400,000 was expended in providing a building and equipment. To provide for maintenance, Mr. Andrew Carnegie gave sufficient funds to produce an annual income of about \$20,000. The school was formally opened in September, 1908. Only men who are employed during the day are admitted to its classes. Evening classes are held on Mondays, Wednesdays, and Thursdays. The season comprises seventy-two evenings.

Courses of two seasons' duration are offered in machine construction, industrial electricity, steam engines and boilers, structures, architectural working drawing, and industrial chemistry. Courses of one season duration are offered in sheet metal drafting, mechanical drawing, industrial arithmetic and shop formulæ, estimating for architects and builders, firemen's class, heating and ventilating, practical mechanics, heat, and hydraulics, and gas and gasoline fixtures.

If sufficient interest can be secured, Saturday afternoon classes will be organized in the season of 1909-10.

ROCHESTER FACTORY SCHOOLS.

During the summer of 1908 the board of education of Rochester, N. Y., made an investigation "to determine what form of education would best fit boys and girls to enter the industries of the city." The supervisor of manual training was directed to visit a number of local factories and ascertain their needs and requirements in this regard. Superintendents and foremen were asked these questions:

1. What deficiencies do you find in the education of the boys and girls who come to work in your factories which prevent them from rapid advancement?

2. Can you suggest any form of manual or mental training which would increase their earning power and make their promotion more rapid?

In response to these inquiries superintendents and foremen of factories indicated in substance the class of boys wanted, as follows:

1. Boys who can apply the mathematics they have learned in school to the actual problems of the factory.
2. Boys who can state their needs to the foreman clearly and concisely.
3. Boys of wider general information who know something of the materials used and the processes of their preparation.
4. Boys who will take an interest in their work and stick to the trade being learned.

As a result of this investigation it was decided to open an industrial improvement school, and the Rochester Factory School, opened December 1, 1908, was the outcome. An 8-room elementary school building was fitted up with rooms for shopwork, drawing, and study. During the spring term of 1909, 100 boys received instruction. These were divided into four classes of equal size, as follows: Class A, advanced woodworking; class B, elementary woodworking; class C, advanced mechanical and electrical work; class D, elementary mechanical and electrical work.

The following is the course of study for the first year:

	Hours a week.
Mathematics -----	4
Drawing -----	5
English -----	3½
Spelling -----	1½
Industrial history -----	1½
Shopwork -----	15

The school is open from 8.30 a. m. until 3 p. m., with a half hour at noon for luncheon. On Saturdays the shops are open from 8.30 a. m. to 12 noon. Only short summer vacations are allowed.

Other factory schools are to be opened from time to time as the demand for them grows. Mr. Alfred P. Fletcher, formerly supervisor of manual training, is director of industrial training. (Circular of division of trades schools, New York, educational department.)

SCHOOL FOR APPRENTICES OF THE LAKESIDE PRESS, CHICAGO.

The school for apprentices of the Lakeside Press was organized July 6, 1908, with the object of training competent compositors, pressmen, and other workmen for its many departments, some of whom will be able to fill responsible positions in the factory and counting room. As stated in the announcement of the school, issued May 1, 1909, boys have a hard time learning a trade under modern conditions:

The workmen are either too busy, or have no inclination to be bothered, and as a result the apprentices pick up what knowledge of the trade they can, usually imitating some workman, good or bad, alongside of whom they may work.

To meet this situation the Lakeside Press takes boys and teaches them the trade under factory conditions, at the same time continuing their academic education.

Only grammar school graduates between 14 and 15 are admitted as apprentice compositors to the school. For apprentice pressmen the age requirement is between 16 and 18. A contract is entered into, the firm in each case agreeing to teach the boy the trade, and the parents agreeing that the son shall remain as an apprentice for a term of years. The boys are paid \$2.40 per week the first year, this being at the rate of 10 cents per hour for the time actually in the factory. The second year the rate is \$3 per week. Beginning with the third year the rate is \$5 per week, with a substantial increase every six months, until the scale of \$20 per week is reached at the end of the apprenticeship.

The students are in school three and one-half hours daily the first two years, one-half of this time being devoted to trade instruction and one-half to academic work. They also work four and one-half hours daily in the shops in different departments, where they select ultimately the department they will enter. After the first two years they will work regular shop hours in the factory, except two or three hours a week devoted to school work, this latter including a review of arithmetic with applications to the printing trade, algebra, physiography, and particularly English.

SCHOOL OF THE LEHIGH VALLEY COAL COMPANY.

The Lehigh Valley Coal Company has opened a trial school for its employees at Lost Creek, Schuylkill County, Pa. The courses of study of the International Correspondence School, of Scranton, Pa., are used, supplemented by personal instruction. Employees are admitted upon the application of their immediate superior. The only charge to students is the cost of the correspondence course. The company provides teachers, rooms, equipment, and lecturers. The enrollment in February, 1909, amounted to about 100. The students were taking various technical courses, more or less directly connected with coal mining.

XIII. HOME ECONOMICS.

SCHOOL OF HOUSEHOLD ARTS, TEACHERS COLLEGE, COLUMBIA UNIVERSITY.

A school of household arts was organized in 1909 as a division of Teachers College, Columbia University. As stated in its first announcement for 1909-10, it is designed primarily to provide preparation for teaching positions of all grades, from the primary school to

the university, in the special fields of the household arts and sciences; also for positions as supervisors of domestic science and art in the public schools, heads of departments in normal schools, and superintendents and teachers in training schools for nurses; also special preparation for various social workers who teach the household arts in connection with settlements and other social institutions.

A two years' professional curriculum, requiring the previous completion of two years of academic or technical training in advance of the usual college-entrance requirements, leads to a bachelor's degree in education. Graduate curricula for advanced students lead to higher degrees and diplomas. All candidates for degrees and diplomas must spend at least one year in residence.

Not only is provision made for the training of teachers, but a proper combination of courses provides the necessary technical training for institutional positions which require much the same equipment, such as those of household manager in school and college dormitories, hospitals, and other institutional households, dietitian in institutions, superintendent of school lunch rooms, manager of institutional laundries, superintendent of day nurseries, house decorator, etc.

The courses given in this school are grouped under 10 heads: (1) Household arts education; (2) nutrition; (3) household chemistry, physiological chemistry; (4) foods and cookery; (5) textiles and needlework; (6) household arts, fine arts; (7) household administration; (8) hospital economy; (9) physiology, bacteriology, hygiene; (10) house structure and sanitation.

Special classes are provided for nonmatriculated part-time students who wish to perfect themselves in such subjects as household management, buying, household accounts, home care of the sick, care of infants and small children; foods, and cookery in its various divisions; and various divisions of textiles and needlework.

In September, 1909, will be opened a building costing more than \$500,000, and devoted exclusively to instruction in the domestic arts and sciences. One floor is devoted to foods and cookery, another to textiles and needlework, another to the application of chemical and biological sciences to household matters. There will also be various special studios and laboratories.

STATE NORMAL SCHOOL OF MANUAL ARTS AND HOME ECONOMICS AT SANTA BARBARA, CAL.

On the 27th of March, 1909, Governor Gillett, of California, approved a bill creating the above-named normal school, said to be the first of its kind in the United States. The legislature appropriated \$10,000 with which to begin in August the work of the school in

training teachers for this branch of public education. Miss Ednah A. Rich, through whose efforts mainly the school was established, has been elected president of the institution by the state board of education. Teachers who have had a year of successful experience, normal and university graduates, and students from such institutions who bring satisfactory recommendations, will be admitted as students. Previous preparation in methods of teaching, pedagogy, and psychology is required before entrance. The one-year course will entitle graduates to teach in elementary schools the special subjects studied. This state school absorbs the Anna S. C. Blake Manual Training Normal School, heretofore conducted by the city.

NEW COURSES IN HOME ECONOMICS AT THE UNIVERSITY OF WISCONSIN.

A University of Wisconsin bulletin announces (June, 1909) that the courses to be given during the next college year in the reorganized department of home economics of the college of agriculture of the university include three distinct lines of work adapted to different classes of students, as follows:

1. A four-year general course with special reference to preparation for home making, leading to the degree of bachelor of science.
2. A general course in home economics, including supplementary work in pedagogy, which will prepare students for teaching domestic science in grade and high schools.
3. A general survey course in home economics for those desiring only a general knowledge of this subject, which may be pursued by students in the college of letters and science who are candidates for the degree of bachelor of arts.

For advanced students, a teachers' course will take up more advanced problems, and an opportunity for special investigation in home economics will be offered.

STOUT INSTITUTE HOME MAKERS' SCHOOL.

Stout Institute, Menomonie, Wis., established a home maker's school in 1907, designed to prepare young women for the responsibilities of home life. The subjects included in the course are the house, food study and cooking, clothing and household fabrics, care and nurture of children, home nursing and emergencies, and the social, industrial, and ethical relations of the woman in the home and in society. Eighteen students were enrolled in the course in the year 1908-9.

In September, 1908, the institute organized a trade school for plumbers and bricklayers. There were enrolled 16 students in the course for plumbers and 1 in the course for bricklayers.

AMERICAN HOME ECONOMICS ASSOCIATION.

At the meeting of the Lake Placid conference on home economics, held at Chautauqua, N. Y., in 1908, a committee on organization was appointed to draw up a constitution and working plans for the American Home Economics Association. The committee submitted its report at the meeting of the teachers' section of the Lake Placid conference at Washington, D. C., December 31, 1908, when the American Home Economics Association was organized.

The object of the association, as stated in its constitution, shall be "to improve the conditions of living in the home, the institutional household, and the community." It shall aim to advance its purpose—

by the study of problems connected with the household; by securing recognition of subjects related to the home in the curricula of existing schools and colleges; by securing the establishment and standardization of professional courses and schools for the training of teachers, and of home, institutional, social and municipal workers; by encouraging and aiding investigations and research in universities and by the state and federal governments; by publications, professional and popular; and by meetings, local and national, that knowledge may be increased, and especially that public opinion may be informed and advancement made secure by legislative enactment.

All who are interested in home problems are eligible to membership in the association. The association meets annually. It publishes *The Journal of Home Economics*, which is issued bimonthly. The principal officers for 1909 are Mrs. Ellen H. Richards, Massachusetts Institute of Technology, Boston, Mass., president; Mr. Benjamin R. Andrews, Teachers College, Columbia University, New York City, secretary-treasurer.

XIV. COEDUCATION OF THE SEXES.

Coeducation, or the instruction of both sexes in the same schools and classes, which is always a subject of more or less discussion in this country, has recently occupied unusual attention in States in which the policy seemed to be most firmly established. This discussion pertains entirely to the sphere of secondary and collegiate education. The elementary public schools throughout the country are, as a rule, coeducational. The few exceptions are found in cities on the Atlantic seaboard, in which free public schools were first established for boys only, and the subsequent demand for similar provision for girls was necessarily met by new buildings and accommodations. This arrangement affects but a small proportion—not above 4 per cent—of the pupils enrolled in elementary schools.

SEGREGATION AT THE ENGLEWOOD HIGH SCHOOL.

Separate high schools have long been maintained in Boston (the old city), New York City, Philadelphia, Baltimore, Charleston, and New Orleans. In the West the high schools have universally followed the course of the elementary schools in this respect, and hence the experiment of segregation undertaken in the high school of Englewood (Chicago) some four years ago excited unusual attention.

The following account of the experiment referred to has been furnished to the office by Principal Armstrong:

The experiment in instructing boys and girls in segregated classes was begun in the Englewood High School, Chicago, in February, 1906. The entering class at that time consisted of about 150 pupils. Their programmes were so arranged that while they met in the same division rooms and studied in the same study hall, they recited all lessons in segregated classes. Classes were so distributed that every teacher who had a boys' class had also a girls' class. This was not only to give teachers a chance to see the contrasts, but to prevent the criticism that one sex was to be given the advantage of the better teachers.

At the end of the first half year a referendum of the parents was taken on the two following questions:

1. Do you feel that your child was benefited by being in a segregated class?
Yes or no.

2. Would you advise that the plan be extended to the next incoming class?
Ninety per cent answered both questions in the affirmative. The September class, consisting of about 500 pupils, was segregated in the same way, and after a year's trial a second referendum was taken on the same questions, except that the ballots were accompanied by a stamped envelope addressed to the superintendent instead of being returned by the pupil to the school. The result of this larger referendum was that 85 per cent answered yes to both questions.

The work was then extended to the second-year class, and now about 1,000 pupils are being taught in segregated classes in their first and second years.

The immediate result has been to increase the relative number of boys in the second and third years of school, and to materially improve their scholarship. Heretofore the scholarship of boys was far inferior to that of the girls. Now, with the adaptations of the work which we have been able to make, the boy comes to the upper classes better equipped than ever before. The former plan of giving both a boys' class and a girls' class to the same teacher has not been kept up, for the reason that it was found that not all teachers are equally well adapted to teaching both sexes. Nor does it follow that all men are better adapted to teaching boys than women are. As a general rule, however, boys do better under men teachers during these beginning years of adolescence.

The most obvious facts beside those stated above are that pupils and parents like the plan. Pupils say that they get closer together, understand each other better, and are not so afraid of being criticised. The leading traits of the sexes are more marked and so the teacher can see better how to adapt the work to the needs of the class. The classification of pupils makes grading more perfect, and hence less friction. The teacher can develop her subject more logically. There is a little more reserve noticed between the sexes, and the opportunities for the smart boy to show off are considerably less. Boys will not tolerate conduct in the segregated class that all wink at if there are girls present to laugh. The discipline in the boys' classes can be made more stern without making it unnecessarily severe on the girls. In some studies, such as physi-

ology, the work is made more personal, and in written work the boys' habit of postponing the disagreeable task is prevented by supplying the needed will power for immediate action. In history the boy is interested in a different line of events than the girl and so makes greater progress alone, while in all studies that require observation and logical reasoning and experiment he excels. The girl excels in all languages, literature, and art. In mixed classes neither one helps the other, as each is impatient to go on in his or her own course.

As principal of the school I am highly gratified with the work, and believe we are doing far more for both sexes than ever before. I wish to deny the implication that boys are superior to girls because they finally become, or may become, intellectual leaders, or that girls are superior to boys as shown by the scholarship records of every secondary school. This experiment has shown me that each is superior to the other sex in the traits of character and the kind of intellect nature requires of each. We, the educators, have been at fault in not recognizing that man and woman live and move in parallel courses, and that at the beginning of that period when nature is trying to differentiate the sexes we have been working against her by providing identical instruction, as if the life work of each was to be the same.

My conviction is that we should keep the boy and the girl in the same high school so as to preserve the same social environment, but teach them in different classes so as to adapt the work to the highest needs of each.

SYSTEM PURSUED AT THE CLEVELAND TECHNICAL HIGH SCHOOL.

The Cleveland Technical High School is organized on a plan somewhat different from that which prevails in other schools of its class in this country.

As stated by Mr. Elson, superintendent of schools:

The boys and girls are in separate classes, with separate study halls. This arrangement exists, not for reasons of sex, but because of the widely different kind of work. The academic work in this school is related very closely to the technical or shop work, so that the chemistry which the girls have, being chiefly applied chemistry, is different from that taken by the boys. The same is true of physics, English, mathematics, etc.

Practically, it will be seen that a school for boys and a school for girls are conducted in the same building under one direction. The prospectus issued by the institution states:

The department for girls will have domestic science and domestic and industrial art for its basis, and around these studies the rest of their work will be grouped. Home-making courses are of greatest value to girls, and to train in this direction will be the aim of these departments. Cooking will be very practical and comprehensive, covering preparation and analysis of foods, the study of food values, and the preparation and serving of complete meals. This will be supplemented by courses in home planning and house decoration, taking up the study and arrangement of rooms, wall and floor coverings, study of furniture and pictures, draperies, etc. This will be organized with particular reference to economy and good taste. Segregated classes for the study of physiology and personal hygiene will give students an opportunity to acquire a knowledge of those things which are so essential to their future health and happiness.

This instruction will be supplemented by a complete course in home nursing, including first aid to the injured, the care of invalids and particularly of children. Instruction in our high schools has never been specific enough along these lines, but has been of a purely general nature. These courses are to be very practical and to the point, to the end that when a girl has forced upon her the care of the home and the family she will be thoroughly prepared for functions of this sort. Keeping of household accounts, economic home management, marketing, etc., will receive due consideration.

Similar opportunities for specialization during the last two years of the course will be offered girls as are provided for boys. In most classes the nature of the studies and method of teaching demand a separation of boys from girls.

The school has been in operation over a year, and is conducted on the basis of four twelve-week terms with a week of vacation following each term. The experiment of a summer quarter has been tried the present year, and a large enrollment is reported. The superintendent expresses the opinion that this is the first instance in this country of the maintenance of a public high school all the year around.

ADMISSION OF WOMEN DISCONTINUED AT WESLEYAN UNIVERSITY.

The year has been marked by a few events that have excited renewed discussion of coeducation as related to universities.

The admission of women students to Wesleyan University, Middletown, Conn., is discontinued by a vote of the trustees at a special meeting held in New York in March last, 30 out of the 50 members of the board being present.

The text of the resolution is as follows:

Resolved, That no woman be admitted to Wesleyan University in any class later than that entering in the year 1909; but nothing in this action shall be construed as in any way conflicting with the rights and privileges of any woman who may be or become a member of that class or of any previous class.

Wesleyan University is a Methodist institution founded in 1831. Women were admitted in 1872, but they have never formed a large proportion of the students, and the present year numbered only 30 as against 292 men. The alumni and undergraduate male students have manifested decided opposition to the women students, and it is understood that a number of the trustees who voted for the above resolution are not opposed to the idea of coeducation, but were satisfied that women students would not be accorded proper recognition under the existing circumstances.

It is understood that the proposition to establish a coordinate college for women is favorably viewed by the trustees, but this would be impossible unless new endowments are forthcoming. A committee has been appointed to secure the needed funds, and if this is accomplished a college will be established for women holding relations to Wesleyan University similar to those existing between Harvard and Radcliffe, Columbia and Barnard, and Brown and Pembroke.

COEDUCATION AT THE UNIVERSITY OF WISCONSIN—ADDRESS BY PRESIDENT
VAN HISE.

An arrangement in the University of Wisconsin for the separation of students by sex in certain classes, intended primarily for the advantage of the women students, excited apprehensions in some minds that that university might adopt measures discriminating against women. The fear of such action is dissipated by the following resolution passed by the board of regents, June, 1908:

Men and women shall be equally entitled to membership in all classes of the university, and there shall be no discrimination on account of sex in granting scholarships and fellowships in any of the colleges or departments of the university.

It is not out of place to recall here an important contribution to the discussion of coeducation made by President Van Hise, of the University of Wisconsin, in his address before the Association of Collegiate Alumnae at the quarter-centennial meeting in Boston, November 6, 1907, which has been the theme of much subsequent controversy.

Among special aspects of the subject unfolded in that address is that of a social problem arising from "the increase in numbers of men and women in coeducational institutions with no very serious purpose." As a consequence of this increase, President Van Hise says:

There is undoubtedly a tendency among the women to regard as successful the one who is attractive to the young men—in other words, social availability rather than intellectual leadership is regarded by at least a considerable number of the young women as the basis of a successful college career. While this view may seem absurd, a little reflection will convince one that the tendency is perfectly natural—indeed, is as deep seated as many of the most-firmly established traditions in reference to the relations between the sexes. So far as I can see, this obstacle will always be a real one in coeducational institutions. A satisfactory solution of the problem of social affairs will only be accomplished by a recognition of its existence, by the development among the young women of their own ideals through insistence that they shall set their own standards in coeducational as in the women's college—that they shall not accept the standard of the least earnest fraction of the young men—that of social availability.

A second consideration arises from a tendency toward "segregation by subjects and courses." On this point Dr. Van Hise says:

When, as a matter of fact, in a given course women, for one reason or another, become predominant; this acts as a deterrent to the free election of the course by considerable numbers of young men, and vice versa.

To this natural segregation is added, he notes, "segregation on a large scale by the establishment of courses and colleges which are practically for the one sex or the other." Instances of this latter condition are the colleges of engineering, law, commerce, agriculture,

and medicine, essentially men's colleges, and similarly courses for training the heads of households, established for women.

Doctor Van Hise sums up his whole presentation of this case as follows:

Blindly ignoring facts and persisting in an old policy, regardless of results, will weaken rather than strengthen coeducation. Believing as I do that the adoption of coeducation in the West, which has led to the higher education of tens of thousands of women who would otherwise have had no opportunity to obtain a college training, has been of immeasurable importance to the nation; believing as I do that coeducation gives satisfactory scholastic results for both sexes, I am in favor of taking such steps as are necessary to maintain coeducation in full vigor in the colleges of liberal arts.^a

ADJUSTMENT OF THE EDUCATION OF WOMEN TO THE REQUIREMENTS OF PRACTICAL LIFE.

The general movement for the higher education of women has apparently not been affected by the action of particular institutions in regard to coeducation. The public sensitiveness with respect to this subject obscures sometimes the importance of efforts on the part of university authorities to bring about a fuller and better adjustment of their facilities to the requirements of professional and social life. The consideration of sex necessarily determines some of these adjustments, since they pertain to the opportunities and duties that practical life presents to students after formal education is completed. For example, the provision for courses of instruction in domestic science and arts has special reference to women students. The importance of such courses is greatly increased by the call for the application of the knowledge and training thus imparted in new fields of municipal service and institutional administration. In view of this enlarging field of activity, the department of instruction in household arts at Columbia University has been expanded into a school which will open in September fully equipped with a laboratory building and studios costing over half a million. The comprehensive plans of this school include courses of instruction for the preparation of teachers of household arts in schools and colleges, as well as for the technical instruction of women who wish to be qualified to manage their own households or become administrators of larger institutional households. There are certificate courses for the dietitian and for the training of women who purpose to apply their artistic gifts to interior decoration, and departments of dressmaking, millinery, costume designing, home architecture, etc. This school is more fully described on page 175.

^a "Educational tendencies in state universities," by Charles R. Van Hise, *Educational Review*, December, 1907. (See in this connection, also, an article on the movement against coeducation, by Wardon A. Curtis, *Independent*, Aug. 6, 1908, and one on the University of Wisconsin, by Edwin E. Slosson, *Independent*, July 1, 1909.)

The regents of the University of Wisconsin have provided for the reorganization of the department of home economics, which is to be located in Lathrop Hall, a new building for women students, where it will occupy rooms specially fitted for its accommodation.

Bedford College for women, one of the colleges of the University of London, offers a special course in hygiene extending over four terms. The calendar of the university states that the course is—

suitable to the requirements of women wishing to become factory or sanitary inspectors, teachers of hygiene under county councils and inspectors and health visitors for municipal councils, health and education committees or other organizations for promoting the public welfare. The course is arranged on a scientific basis, and includes lectures on hygiene and public health with demonstration visits and inspections, lectures and practical work in chemistry, physics, physiology, and bacteriology.

Kings College, London University, has just organized in the woman's department a three-year course in home economics, leading to the diploma of mistress of home science.

PROVISION FOR ADVANCED STUDY.

In connection with movements relating to the higher education of women it is interesting to note the increasing aid and recognition accorded to women who devote themselves to professional or scientific pursuits. Among the few funds now available for women who are prepared for advanced study and research, the following may be noted:

The Baltimore Association for the Promotion of the University Education of Women offers a fellowship of \$500, available for study at an American or European university. In exceptional instances the fellowship may be held two successive years by the same person.^a

"The Society of American Women in London," in combination with the General Federation of Women's Clubs with which it is affiliated, has founded a scholarship for women available at Oxford, Cambridge, or London University. The holder of the scholarship for the present year is studying at Oxford. It is hoped, eventually, to raise a fund sufficient to endow two scholarships for each State.

The Woman's Educational and Industrial Union of Boston, department of research,^b offers a fellowship for an investigation of present-day conditions which concern the industrial life of women or the condition of women in industry. Two alternatives are provided by the plan for the fellowship: One, an opportunity looking toward a college degree by combining work in college courses with training in industrial research; the alternative plan provides for the

^a The chairman of the committee on award is Dr. Mary Sherwood, The Arundel, Baltimore.

^b The department for the coming year will be under the direction of Asst. Prof. Susan M. Kingsbury, Ph. D., of Simmons College.

pursuit of research work at the Educational and Industrial Union alone, giving full time for one year of ten months with a fellowship of \$500.

Bryn Mawr College announces 10 graduate scholarships, 5 open to English, Irish, or Scotch, and 5 to German women students who have attained a standard equivalent to that of the bachelor's degree as given by any American college or university of acknowledged standing. The scholarship covers the fees for board, residence, and tuition at Bryn Mawr College for one academic year, and amounts to \$405.

PROFESSIONAL RECOGNITION OF WOMEN ABROAD.

The most important event of the year under review affecting the professional recognition of women is the action taken by the Council of the Royal College of Surgeons of England admitting women to the diploma of the college.

The resolutions to that effect, adopted at the quarterly meeting of the college, held October 15, 1908, are as follows:

Resolved, (a) That steps be forthwith taken to admit women to the examinations of the conjoint examining board in England, and to the examination for the diploma in public health; (b) that women be admitted to the examinations for the fellowship and to the examinations for the license in dental surgery.

In accordance with this decision a new by-law relating to the admission of women was made and ordained at the quarterly meeting of the council of the Royal College of Surgeons held April 1, current, and the same was duly submitted to the government authorities for sanction and ratification.

This action brings to successful issue an effort that has been maintained through twelve years of agitation and discussion.

In the preceding report of this series attention was called to a memorial addressed to the fellows of the Chemical Society of Great Britain asking for an inquiry as to the views of the society as a whole on the question of admitting women to the fellowship. It is reported that—

at a meeting of the Chemical Society, held at Burlington House on October 22, the president, Sir William Ramsay, announced that 1,758 voting papers had been received on the question of the admission of women as fellows of the society. There were 1,094 in favor of the admission of women, and 642 against. Some sent in no papers at all, and 22 papers were returned with no particular mark on them. The result of the ballot was received with applause.^a

The following citation from a current journal is significant of the change that is gradually taking place in university circles of England relative to the recognition of women students:

There was interest of more than one kind attached to a debate held the other day at the Cambridge Union on the question of whether the university ought

^a See *Englishwoman's Review*, January 15, 1909, pp. 61-62.

not "immediately" to admit the women who earn degrees to receive those honors. Up to the present, though the women students of Girton and Newnham may take the same examinations as men—and, as a matter of fact, a large number of those women have gained very high honors—the university which consents thus to examine their acquirements refuses to allow them to receive the degrees that they have thus earned. The last time the matter was voted upon was in 1897, when it was decided by a large majority of the graduates not to redress this grievance, and on that occasion the undergraduates of the period demonstrated hotly against the lady students. If the recent vote at their principal debating society is a sufficient index of the view of the present generation of young men, however, they are in advance of their predecessors on this subject, as a resolution to the effect that the university ought immediately to admit women to its degrees was carried by 147 votes for to 55 against. The mover of the resolution was the son of a lady who herself came out, some twenty-three years ago, at the very head of the list in classical honors. The lady senior classic, then Miss Agnata Ramsay, married Doctor Butler, master of Trinity, and it is their son, Mr. J. R. M. Butler, who moved the resolution in favor of giving women degrees—a charming tribute on his part to his learned mother.^a

The board of Trinity College, Dublin, has elected a woman, Miss Constantia Elizabeth Maxwell, to be an assistant to the professor of modern history. Miss Maxwell is the first woman who has become a member of the teaching staff of Trinity College since its foundation.

At the meeting of the Association for Maintaining the American Women's Table at the Naples Zoological Station, held April 24, 1909, at the American Museum of Natural History, Miss Caroline McGill, of the University of Missouri, was appointed a scholar of the association for research at the Naples station. The award of the prize of \$1,000 offered every year for the best thesis written by a woman on a scientific subject embodying an independent laboratory research in biological, chemical, or physical science was made to Miss Florence Buchanan, D. Sc. of London University, fellow of University College, London, for a thesis entitled "The time taken in the transmission of reflex impulses in the spinal cord of the frog." Miss Buchanan has been engaged in research work at the University Museum, Oxford, since 1896, and has published 16 papers. It is worthy of remark that, of the 11 theses presented in competition, 5 were sent from England and 1 from Canada. The subjects of 4 were morphological, 2 bacteriological, 2 zoological, 1 physiological, 1 was in the domain of physical chemistry, and 1 in parasitology. The general average of these investigations was very high, distinctly above those of the three previous competitions. A fifth prize will be offered in 1911.

^a See *The Educational Times*, April 1, 1909, p. 159.

XV. INTERNATIONAL CONGRESSES.

THIRD INTERNATIONAL ART CONGRESS.

The Third International Art Congress for the Development of Drawing and Art Teaching and their Application to Industries convened at London August 3-8, 1908. The following statements as to the sessions and scope of the Congress are taken from the published transactions:

The full sessions of the congress were held in the Great Hall of the University of London, South Kensington. Sectional meetings were held and special lectures given in the lecture theaters of the Victoria and Albert Museum and the Royal College of Science. The international congress exhibition was housed partly in the Royal College of Art and partly in the reconstructed galleries of the Victoria and Albert Museum, kindly placed at the disposal of the British committee by the board of education.

The growth of the congress affords striking testimony of the increasing appreciation of the importance of its aims and its work. At Paris—where the first congress was held in 1900—there were 30 delegates and 516 members from 15 different countries. The second congress at Berne in 1904 was attended by 172 delegates and 823 members (including associate members) from 21 countries. The third congress had a membership of no less than 1,819, including 299 delegates, of whom 74 were officially appointed by their respective governments, and no fewer than 38 countries were represented. The congress exhibition covered more than 60,000 square feet of wall space and showed the work of 21 nations. Exhibits were sent from countries as far distant as Australia, Mexico, and Newfoundland. An exhibit was promised from Siam, but at the last moment it was not found possible to dispatch it in time. To the regret of many, Italy, Japan, and Russia were unrepresented at the exhibition for various reasons. Exhibits from these countries will be looked forward to with interest at the next Congress. * * *

The subjects for discussion at the congress were determined by the international federation. They were as follows:

- (1) Drawing in conjunction with modeling and manual work.
- (2) The teaching of drawing in the professions; its definite inclusion in the university curriculum.
- (3) The training of art teachers.
- (4) The organization of professional art training.
- (5) Schemes of apprenticeship and scholarship. Progress made since the last congress.
- (6) Unification of signs and symbols in mechanical drawing.
- (7) Methods of disseminating ideas in art and of developing public taste.
- (8) International codification of terms used in the teaching of drawing.
- (9) Experiments made toward establishing methods of teaching young children adapted to their nature and capacity.

The United States had above 200 representatives at the congress, including two members, Mr. Henry Turner Bailey, of Massachusetts,

and Mr. Charles M. Carter, of Denver, Colo., accredited as national delegates.

In a report on the professional aspect of the congress, comparing the impressions made by the presentation of art instruction in this country and in European countries, Mr. Bailey says:

In the matter of elementary art education we have led and still lead the world. Some of the problems we solved long ago our friends across the water are still discussing; certain principles with us well established, they still hold as experimental. In equipment, both for actual work and for training the taste through schoolroom decoration, in flexible and comprehensive courses, in the free use of drawing for illustrative purposes, in originality and spontaneity of result, and, perhaps most notably, in the teaching of color, the United States is conceded by all to stand first. In the work of the secondary schools and more advanced institutions our results do not appear to such advantage. The reason, I believe, is not far to seek. We have a different ideal, an ideal demanding more time for ripening its fruit. It is comparatively easy to secure mere technical finish, by aiming at that alone, to hold a boy who has never tasted of freedom, who knows nothing of the joys of free expression, of original design, to the painstaking production of a finished drawing after the manner of his fathers. It is quite another thing to fire a boy with the passion to think for himself, to see for himself, to express himself frankly and fearlessly in his own way—the very tap root of fine art—and to lead him to perfect his own technique.

Our friends abroad lament our failure to secure good technique, but are in open revolt against their own traditions and conventional standards by which such technique has been secured. They envy us our freedom, our dash, our originality, but warn us against the methods by which we have retained these qualities in our work. Our ideals—thought first, technique later; originality, not mimicry; personality, not conventionality; the child first, his expression as a natural consequence—will give to our advanced work, one of these days, qualities which will place it in the very forefront of advanced art educational achievement.

Mr. Leslie W. Miller, principal of the Pennsylvania Museum School of Industrial Art, Philadelphia, says:

Observers from this side are apparently pretty well agreed upon certain points that the congress, with its attendant exhibition, gave them a chance to observe. First of all, our observers are agreed that drawing, as such, is much better taught over there than it is with us. We do a good deal of hemming and hawing, and have a lot to say about the things that the study may be made to stand for and suggest, and all that, but we are all agreed that pupils of the same age draw a great deal better in the European schools than they do in ours. Second, we note that comparisons between the work of our high schools and that done by pupils of the same age over there are hardly fair, for the reason that they do not have in Europe high schools to teach everything to everybody, as we do, and that the work which they have to show over there is that of picked pupils, who go to schools that are devoted to technical aims, where a great deal more attention is paid to drawing than we give to it here. Third, we get all the comfort we can out of the fact that in America everything we have, such as it is, is for the benefit of everybody, without regard to class or capacity, and that along with our teaching of the subject goes a lot of work that possesses distinct value in the way of esthetic culture and general knowledge, which is,

we believe, quite as important in the long run as any direct results in purely disciplinary work would be likely to be. * * *

In the very elementary grades our work is excellent, but the elementary flavor persists entirely too long. Higher up in the grades our standards too often go to pieces and drawing fails to keep the place that we claim for it among the things that are to be taken more seriously as essentials in all general education.

We need, I think, to insist more on the disciplinary element in drawing, which we are, just now, a good deal inclined to fight shy of through a dread of becoming "mechanical." It is just because it is so close in spirit to mathematics that it is valuable as a means of discipline. Our drawing should be definite and exact, which means that it should make the utmost use of exercises that admit of having their rightness or wrongness demonstrable.^a

Mr. Carter notes as one of the most interesting discussions of the congress that on the earlier stages of art instruction. Among those who presented papers in this section were Doctor Kerschensteiner, of Munich, who has devoted several years to exhaustive study of the drawings of children. Mr. Carter cites the following conclusions embodied in the paper referred to:

In the primary schools, at least, boys and girls require a different syllabus.

Brush work should be preferred to all other technique in decoration drawing.

As a rule drawing from nature can not be successfully taught in class before the age of 10.

Where the systematic class teaching is begun at an early age it is desirable to organize it exclusively as drawing from memory following class discussion.

Drawing from good copies should have no place in class work, but it may be unreservedly recommended for home work.

Mr. E. Cooke, representing the Teachers' Guild of England, who has given great attention to the same subject, differed from Doctor Kerschensteiner in several particulars. Mr. Cooke said in part:

I want to say a word or two about the suggestion that Doctor Kerschensteiner made. We are working on much the same lines, but we have not come to exactly the same conclusions, and I should like to say a word or two about the conclusions to which he has come. First of all he suggested that in primary schools, at least, boys and girls require a different syllabus. I think not. I have never seen any reason why the girls and boys should have different treatment, either for drawing or anything else. I do not agree with that, although I agree with nearly all but that. He said next that "decorative drawing should only be eliminated from the curriculum of the primary schools whose teaching staff show no artistic taste; the children themselves are invariably ripe for such exercise." I think he is right about the children, but it should not be eliminated from any school. Children ought not to draw plants first. They should learn something of the shape of the lines and forms of which the plants are composed, and put these lines and forms in order. Order is the basis of decorative design, and every teacher in every primary school is able to do that.

Then Doctor Kerschensteiner said that brush work should be preferred to all other technique in decorative drawing. What does he understand by brush work? The word has been confused intentionally in this country. It should refer especially to the powers of the brush itself. Drawing with the brush is

^a Lessons of the London Congress. School Arts Book, June, 1909, pp. 995, 999-1000.

not brush work. Brush work is the analysis and exercise of the peculiar powers of the brush, especially for design. The elements of brush drawing are, I suppose, "brush work." * * *

Doctor Kerschensteiner said that as a rule drawing from nature can not be successfully taught in class before the age of 10. That is a very difficult point. In London children do not get much communication with nature itself, and, though I agree with Doctor Kerschensteiner that to begin drawing from nature is not according to the natural development of the child and may be injurious, I think that children in London enjoy that drawing so much that I hesitate to say it is wrong, if the teacher is a motherly woman who takes what the children can give without insisting on accuracy. There are teachers of that kind in the London County council schools.

Then Doctor Kerschensteiner said that where the systematic class teaching of drawing is begun at an early age it is desirable to organize it exclusively as drawing from memory following class discussion. There, again, I am inclined to differ from Doctor Kerschensteiner. Much of it should be drawing from memory or imagination, or from the child's own knowledge, but systematic help to the child may be given in the way which I suggested the other day. The child begins with its own scribble when it has hardly any ideas at all and evolves form. I think, and I am sure Doctor Kerschensteiner will agree with me, that to follow the development of the child we must find it out first. To follow its development is far more important than drawing from nature.

The resolution finally adopted by the congress regarding art education of the young "embodied in part," says Mr. Carter, the following:

Guard the child's sensibility, make drawing an aid in developing all faculties. Subjects should be chosen from nature, familiar objects, and incidents of child life. They should encourage careful and orderly work, demanding some judgment, as opposed to mere mechanical copies. All illustration and objects of study should be on a large scale easily seen by all pupils.

The theory and practice of teaching as applied to art should be especially studied by teachers.

An important permanent outcome of this congress is the literature to which it gave rise. This includes: The Transactions of the Congress, edited by C. Myles Mathews; A Conspectus of Art Education in the United States (illustrated), edited by Dr. James P. Haney; and an Illustrated Handbook to the Exhibition, edited by Keighley Snowden.^a

FIFTH INTERNATIONAL DENTAL CONGRESS.

The Fifth International Dental Congress met at Berlin from the 23d to the 28th of August, 1909. The invitation sent out by the organizing committee stated that the meeting would celebrate the fiftieth anniversary of the Central Society of German Dentists, and that plans had been made to demonstrate by lectures and discussions at meetings and by an international dental exhibition the development of dentistry in recent years.

^a The last named was published at the offices of the congress, 151 Cannon street, London, E. C.

FIRST INTERNATIONAL CONGRESS ON DOMESTIC SCIENCE AND ARTS.

The First International Congress on Domestic Science and Arts was held at Fribourg, Switzerland, September 29 and 30, 1908. The preparations for the congress had been carried on with great energy by the committee who inaugurated the enterprise,^a and with such success that the participation of nearly 700 members was secured. The programme was exceedingly comprehensive, no less than 72 papers having been accepted for consideration at the sessions of the congress. Fortunately printed copies of these had been circulated, so that discussion was limited to the principal points in each. The value of the congress consisted chiefly in the opportunity it afforded for bringing together accounts of what has already been done in different countries in respect to the training of women for duties of domestic and social life. For the first time it was possible to take a comprehensive survey of the systems developed in the countries that have taken the lead in this matter. From the information collected it is possible to recognize three distinct systems of training in domestic science and arts: The German, the Belgian, and the Swiss. While these systems are very similar, it was agreed that the Germans have the most highly elaborated programme; the Belgians have shown great skill in combining theoretic and practical training, and so shortening the period of instruction; the Swiss excel in the system of training teachers for this specialty. Great interest was excited by the examination of the normal schools of Fribourg, Berne, and Zurich, in which the training of teachers of domestic science and household industries is conducted in a truly scientific manner.

The most prominent questions before the congress were, first, as to the general diffusion of instruction in domestic science and industry; second, the organization of special classes or school for a complete system of instruction in the subject considered; third, the training of teachers for this specialty.

In regard to the first question, opinion was general that since the majority of girls can not continue their studies beyond the primary schools, it is important to introduce domestic arts into the elementary-school course, and for this reason they should be included also in the course of every normal school.

The chief interest of the congress, however, centered in the question of the organization of a complete course of instruction in domestic science and the management of a home with all its varied demands. The wide scope given to this subject indicated that nothing less was purposed than the elaboration of a complete system of special educa-

^a The committee consisted of M. Python, president of the state council of Fribourg; Mme. de Gottrau-Watteville, Mme. Coradi-Stahl, and M. Jean Brunhes

tion for women. The programme approved by the congress for such a complete course of instruction includes the subjects here enumerated in the order of their importance:

First. The selection and preparation of food, including the study of prices, nutritive value, advantages of a vegetable diet, the utilization of garden products, and the management of a kitchen garden in the country.

Second. Clothing, including study of fabrics, cutting and fitting garments, and drawing, design and harmony of colors as auxiliary branches.

Third. Principles and application of natural sciences, physics, and chemistry, as related to food; physiology and hygiene in their relation to health and healthful living.

Fourth. The care of children from infancy to the sixth year, having equal regard to their physical and moral natures.

In order to make the instruction effective, it was urged that every school of the class proposed should include a fully equipped practice department.

The congress agreed that passing beyond the exclusive circle of home, the course of instruction outlined should include the general relations and the social services of which the family is the center. Among the latter were mentioned, in particular, the three great evils that afflict society—alcoholism, tuberculosis, and infant mortality.

The system of instruction advocated by the congress would require a certain maturity of mind for its mastery, hence it belongs to the stage of secondary or professional education.

In the closing session of the congress a resolution was adopted providing for the establishment of a permanent international committee to collect and distribute information relative to instruction in domestic science and arts. The central office of the committee will be in Switzerland, at some place to be determined.

FIFTH INTERNATIONAL CONGRESS ON ESPERANTO.

The Fifth International Congress on Esperanto was held at Barcelona, Spain, September 5 to 11 of the current year. Mr. Herbert Harris and Mr. Edwin C. Reed were accredited as official delegates from the United States. It may be noted in this connection that the First Pan-American Scientific Congress, held at Santiago, Chile, December, 1908, adopted a resolution strongly approving the use of the Esperanto language for international intercourse. Preceded by a preamble expressing the views of the congress as to the importance of this medium, the resolutions adopted were as follows:

(1) The First Pan-American Scientific Congress decides to express to the American governments the pleasure with which it would view the call for a congress to which would come official representatives of all civilized countries,

with the purpose of solving the problem of the adoption of a neutral international auxiliary idiom; and

(2) It agrees to urge upon the Government of the United States of North America that, under its grand auspices, this desire of the scientific congress may be effected.

INTERNATIONAL CONGRESS ON THE TEACHING OF MODERN LANGUAGES.

Among congresses affording special opportunity for the interchange of opinions and experiences on the part of professors of the same subject in different countries should be mentioned the International Congress on the Teaching of Modern Languages, organized by the Society of Professors of Modern Languages in France, and convened at the Sorbonne, April 14-17, 1909. The importance of the subject was particularly emphasized by the recognition accorded the congress by the French Government. It was placed under the direct auspices of the minister of commerce and the minister of public instruction, and the director of secondary education in the ministry of public instruction and the vice-rector of the Academy of Paris gave active support to the preliminary arrangements. All the leading European countries had large representation in the membership; naturally the delegation from the United States was small, but the presence of Prof. C. H. C. Wright, of Harvard University, who had been appointed as a national delegate from this country, was an evidence that the importance of the subject is appreciated by ourselves.

The report of the proceedings of the congress has not yet been issued, but from fragmentary accounts in current journals it appears that while the various topics appointed for consideration were treated mainly from the standpoint of French professors, there was practical agreement on the part of all the delegates that instruction in modern languages might be so organized and conducted as to afford a mental discipline equivalent to that attained by the study of the classical languages. At the same time it was conceded that under present conditions this equivalent has not been reached. It remains for the professors of modern languages in the different countries to apply themselves to the problem of developing the educational resources of the subject upon which they are engaged. It was urged that, in addition to the study of the grammar of the respective languages and the practice that gives facility in writing and speaking the same, the course of study should be extended to include a systematic and profound study of the history, customs, and manners of the peoples themselves. The proceedings of the congress have given a great impulse to the discussion of the conduct of modern-language courses in the principal countries of Europe, and the interest thus created will doubtless be greatly increased by the full report of the proceedings.

FIRST INTERNATIONAL MORAL EDUCATION CONGRESS.

The First International Moral Education Congress was held at the University of London September 25-29, 1908. The widespread interest excited in the preparations for this congress and the stimulating effect that it has had upon educational leaders in Europe and America justify a somewhat extended reference to the circumstances that gave rise to it. These are briefly set forth in the historical introduction to the record of the proceedings of the congress,^a as follows:

In 1905 a new Italian education code was published, laying the utmost stress on moral education and making detailed regulations with regard to moral instruction. In the following year a new Hungarian education code was issued, which is even more emphatic and detailed in its references to moral education. In 1905 a new Austrian education code came to light, containing a large number of references to moral education. In Portugal an excellent manual of moral instruction for primary schools, as distinct from religious instruction, was officially published in 1906 and approved by the Cardinal of Lisbon (*Compendio de Moral e Doutrina Christa*, by Conego Manuel Anaguim, Lisbon; *Livraria Ferreira*). In the United States schemes of moral instruction have been elaborated in many places. In Germany the most recent reading books for elementary schools contain abundance of ethical matter. In Switzerland several cantons have taken distinct steps in the direction of drawing up moral instruction programmes. In Belgium excellent moral instruction syllabuses for primary schools and for training colleges exist. In France and Japan, where moral instruction has already been introduced, the subject is being studied with redoubled interest. In Russia the authorities are turning their attention to this subject, and finally, in England the code of the board of education for 1906 stated that "moral instruction should form an important part of every school curriculum." It is, therefore, not astonishing that 21 governments were represented and that nearly 30 governments assisted the congress in one way or another.

While these preparations were in progress the subject of moral education was earnestly discussed and societies were formed in many countries for the express purpose of stimulating action in this particular. Among these may be named the moral instruction leagues of England and Germany. The initiative with reference to holding a moral instruction congress was taken by the International Union of Ethical Societies at its conference held in July, 1906, at Eisenach. It was this conference also that gave rise to the international inquiry into moral instruction and training, the conclusions of which were published under the editorial supervision of Professor Sadler.^b

The preparations for the congress were vigorously pushed by the executive committee, with the result that auxiliary committees were formed in all the principal countries of the world and 21 countries were officially or semiofficially represented in the membership.

^a Published for the executive committee; *Record of the Proceedings of the First International Moral Education Congress*. David Nutt, 57-59 Long Acre, 1908. London.

^b *Moral Instruction and Training in Schools: Report of an International Inquiry*. 2 vols. Edited by Prof. M. E. Sadler. Longmans & Co., London.

A great service was rendered by the congress in thus bringing together in one comprehensive view statements of the present state of moral education in the countries represented in the congress and unfolding the subject in all its varied aspects. Permanent value was imparted to the proceedings by the publication of the papers that had been prepared with great care, and which were ready for distribution in printed form when the congress convened. Not less than 2,000 copies of the published papers were disposed of within four weeks after the congress met.

In a memorandum prepared for the record of the proceedings of the congress, Prof. J. H. Muirhead, of the University of Birmingham, sums up his general impressions of the congress. Professor Muirhead notes in particular:

(1) The "common agreement that in the formation of character we come in view of the true end of all instruction and training. Not in what children are taught, the information and dexterities they acquire, but in the use they are taught to make of them must we look for the standard and test of all systems of education. Going along with this was a cheering impression of the great amount of solid achievement, of which the facts reported from many countries told."

(2) The distinctive recognition of the fact that as a means of moral education "the school is only a part and at the best a very small part." Hence, "the extension of the leaving age and the co-operation of all religious and other educational agencies in continuing and solidifying the school teacher's work are alone adequate to the situation."

(3) The difference that "emerged on the subject of the relation between moral and religious education." The discussion, he says,

occupied a central place, and the congress will be memorable for the opportunity it gave of having the two great ideals of education, which for the last century have slowly been recognizing each other as mortal foes, clearly set forth in amicable public discussion by some of the ablest of their respective supporters. There was a dramatic element in the session which added to the sharpness of the antithesis. For the first half of the time it seemed as though the deepest issue would be confined to differences in doctrinal emphasis and in pedagogical methods. The wider question was first broached by M. Ferdinand Buisson, of Paris, who, in a short, courageous paper, made it clear that the leading French educationists had long ceased to regard religion as any part of the content of moral education, or as having any vital relation to it. Religion is to receive a formal acknowledgment. Children must be taught "the respect due to the idea of religion, and the tolerance due to all its forms without exception." But for the rest they are to be taught that "the chief mode of knowing God consists in each doing his duty according to his conscience and his reason." After M. Buisson's speech everyone present seemed to feel that in the conflict of ideals he had succeeded in indicating the whole problem of modern education was contained as in a nutshell; all other conflicts were trivial in comparison.

It was not that the supporters of each of these ideals did not know before of the existence of the other, but that the authority and sincerity with which the speeches were delivered on both sides, the touch of personal conviction in men of international reputation, arrested attention, and gave a depth and a meaning to the several contentions which they had not before possessed. On the one side—which, for want of a better name, may be called the “positivist”—there was the emphasis on the concrete; the connection of conduct with social, industrial, civic, and political well-being. In character lie the issues of life for individual communities and humanity at large. Along with this went an uncompromising claim for freedom of conscience and an insistence on intellectual sincerity as the very fountain head of moral rectitude and integrity of character. No individual or society can for long undervalue veracity and continue to count as a member of a spiritual community. As compared with the interests here involved, theologies and doctrinal differences, if advocated in themselves, are as unsubstantial shadows, while if they are turned, as too commonly they are, into a ground of intolerance and superstition—or, worse still, of acquiescence in existing social conditions—they are the most serious obstacle against which progressive forces have to contend.

Just here the other side made itself heard. These defects, it was maintained, are an accident of particular forms of religion. What religion stands for is not a particular system of dogma or discipline, but a claim for the inwardness of morality—for the recognition of the eternal distinction between the natural and the spiritual, and, going along with this, of the reality of sin and the necessity of rising, through a grace which is not our own, from what is at the best mere natural goodness of heart to a vivid sense of the demand that our souls' deeper attachments make upon us. True, this implies the belief in the reality of these attachments; but this is itself part of the witness of consciousness. It is popularly called “faith in God,” but its essence is not the belief in anything supernatural and transcendental, but the sense of a wider fellowship than that represented by any individual society, or even group or succession of societies upon this planet—the conviction that, in ways we are far from completely understanding, the real underlying forces of the world are on the side of our best aspirations, that the ideal is the real, and is most real where it is most true to itself as an ideal. Nor is this faith mere matter of speculation without effect on moral conduct. It is true that the connection is often misrepresented. It is put on a false footing, and the faith itself compromised and forfeited, rather than fortified, by the advocacy of those who seek in it a supernatural sanction for moral conduct. But this ought not to prejudice us against religion, or blind us to the real influence which it has in purifying and refining character and in furnishing the natural breath of spiritual graces—humility, fortitude, resignation, hope, trust, joy—which live with difficulty in the more rarefied atmosphere of positivist belief.

Are these two beliefs incompatible?

In reply to his own inquiry Professor Muirhead continues:

This was the question that was inevitably suggested by what all who were present recognized as a remarkable meeting. What was further remarkable, and was at the time noticed by some of the speakers, was that the answer to it was already hinted at in the very terms in which it was set. It was seen that neither ideal could really afford to ignore or repudiate the other, and that the hope of the future lay in a synthesis that should comprehend them both, and not merely compromise and compound between them.^a

^a Record of the Proceedings of the Congress, pp. 9-10.

SIXTH INTERNATIONAL CONGRESS OF PSYCHOLOGISTS.

This meeting took place in Geneva, Switzerland, August 3-7, 1909. The greatest number of participants were of those who represent the science of physiological psychology, but while in Rome, 1905, at the occasion of the fifth congress, as many as 282 papers on the subject of physiological psychology had been placed on the programme, the programme of the sixth congress announced only 40. The Danish philosopher, Professor Höffding, caused the most profound discussion with his paper on the psychology of religious phenomena. Professor Thiéry, of Louvain, and Professor Nagel, of Rostock, reported on the attempts at standardizing colors, which report is regarded epoch making, though Professor Asher, of Berne, opposed the recommendations of the two savants. A committee was appointed for further investigations and report. It consists of Professors Nagel, of Rostock; Asher, of Berne; Thiéry, of Louvain; Larquier des Bancel, of Lausanne; and R. M. Yerkes, of Columbia.

Attempts were made at agreeing upon uniform definitions to be used in psychology; especially such German terms as "*Empfindung*" and "*Gefühle*," which are rarely distinguished in common language, caused much trouble. Professor Külpe, of Bonn, read a paper on *Gefühle* (emotions). Prof. Jacques Loeb, of the University of California, spoke on tropisms and their importance for psychology. He claimed that psychological phenomena could be traced to physical and chemical laws. He found much opposition to his materialistic view of soul life. The science of æsthetics was represented only by one paper, on rhythmical gymnastics.

THE PAN-AMERICAN SCIENTIFIC CONGRESS.

The Pan-American Scientific Congress was held in Santiago, Chile, from December 25, 1908, to January 5, 1909. Twelve American universities and three national scientific associations were represented in the congress in addition to the official delegation sent by the Government of the United States.^a

The general character of the topics considered is illustrated by the following statement quoted from a report of the congress by Dr. L. S. Rowe,^b chairman of the delegation from the United States.

^a The delegates of the United States to the Pan-American Scientific Congress were: Prof. L. S. Rowe, chairman, University of Pennsylvania; Prof. Thomas Barbour, Harvard University; Prof. Hiram Bingham, Yale University; Prof. Webster E. Browning, Princeton University; Prof. Archibald C. Coolidge, Harvard University; Prof. H. D. Curtis, Cornell University; Col. William C. Gorgas, Isthmian Canal Commission; Prof. Christopher W. Hall, University of Minnesota; Prof. Adolph Hempel, University of Illinois; Mr. W. H. Holmes, Bureau of Ethnology, Smithsonian Institution; Prof. J. Laurence Laughlin, University of Chicago; Prof. Albert A. Michelson, University of Chicago; Prof. Bernard Moses, University of California; Prof. Paul S. Reinsch, University of Wisconsin; Prof. W. F. Rice, Northwestern University; Mr. George M. Rommel, Bureau of Animal Industry, Department of Agriculture; Prof. William R. Shepherd, Columbia University; Prof. William B. Smith, Tulane University; Prof. Jay Backus Woodworth, Harvard University.

^b See American Review of Reviews, May, 1909, pp. 597-600.

Doctor Rowe says:

In the social science, educational, and agricultural sections (three of the nine into which the congress was divided) the main subjects discussed were: (1) International law; (2) financial and monetary problems; (3) educational problems; (4) economic, social, and political problems; and (5) improvement of agricultural methods.

In the same report Doctor Rowe calls attention to the distinction—between the scientific congresses and the Pan-American diplomatic conference which last assembled in Rio Janeiro in 1906, and which will next meet in Buenos Aires in 1910. These scientific congresses possess one advantage over the diplomatic conferences because of the possibility of a full and free interchange of opinion, untrammelled by diplomatic instructions or political considerations. Although the conclusions reached do not take the form of treaties and conventions, they possess the merit of expressing accurately the ripe judgment and the most advanced thought on the important problems confronting the republics of this hemisphere. Viewed in another light, these congresses mark the successive steps in the formation of a continental public opinion. The united and definitely formulated views of the American republics on questions affecting the welfare of the continents must command universal respect.

It was the good fortune of many of the delegates from the United States to visit Uruguay and the Argentine Republic on their way to or from Santiago. Not only was the traditional Latin-American hospitality shown them, but they were received with an enthusiasm so real and spontaneous as to leave a lasting impression on every member of the delegation. Far more important and significant than the cordiality of this reception was the universal desire to be brought into touch with scientific and educational activities in the United States. All the countries of Latin America have received, and still receive, their intellectual stimulus and educational inspiration either from France or Germany. There is a growing feeling, however, that the lessons of educational experience in the United States contain much of value and profit for the people of Latin America. While in Uruguay, the Argentine, and Chile, the delegates from the United States were constantly questioned with reference to our educational organization, and advice and suggestion requested as to the plan best adapted to introduce American methods into their systems. * * *

The Santiago congress also served to demonstrate that in all the countries of Latin America careful scientific research is being conducted in all the higher institutions of learning, and that this research is being directed primarily to the solution of the distinctively national problems. Probably the most vivid impression carried away by the delegates from the United States was the fact that in every Latin-American country there is a group of serious students willing and even anxious to cooperate with their colleagues in the United States in the investigation of problems affecting the welfare of the people of this hemisphere. Every delegate from the United States returned with a better appreciation of the significance of the Latin-American civilization and of the mutual services which the culture of the North and South may render each other.

INTERNATIONAL CONGRESS ON TUBERCULOSIS.

Among the topics discussed at the International Congress on Tuberculosis, which met at Washington on September 28, 1908, two may be noticed here as showing the steps taken in our colleges and schools in relation to the disease.

The first is a paper by Prof. W. H. Norton, of Cornell College, Iowa, with the title "The colleges of the United States and the campaign against tuberculosis," in which the author describes the instruction given at higher institutions in regard to tuberculosis in connection with hygiene or social economics. As illustrations he cites (1) Columbia University, where in 1908 an entire term was devoted to seminar work on the social aspects and control of this disease; (2) the investigations of Professors Fisher, Bailey, and Farnham, of Yale, on the relation of tuberculosis to labor and tenement conditions; (3) the sociological work at the University of Chicago, where students accompany the patients of the college dispensary to their homes, and study local conditions and surroundings and the methods employed in improving the environment; and (4) the work of the University of Wisconsin, whose classes from the departments of political economy and sociology visit Milwaukee to study the social and industrial aspects of the disease. In many colleges the students are securing data as to the prevalence of the disease.

From answers to a questionnaire sent to 200 representative higher schools of the United States it is found that about one-fifth are engaged in investigative work in tuberculosis.

Colleges also furnish lecturers to inform the people of the danger of the disease and the way to combat it. University-extension lectures on tuberculosis are now offered by at least 15 colleges and universities. In some colleges tests are made of the air to detect bacteria, and where these are found in too great quantity the rooms are disinfected with formaldehyde. In some colleges the students are prohibited from rooming in families afflicted with tuberculosis, and others have a regular inspection of dairy herds which supply milk for their boarding halls. Special lectures on tuberculosis are given before student assemblies in about one-fifth of the 200 representative colleges, while regular class-room instruction is provided in many colleges on the causes, results, and prevention of the disease. This is in addition to the propaganda carried on in the special departments of biology and hygiene, sociology, domestic science, sanitary engineering, and economics. (The paper is given in full in *Science* for July 2, 1909.)

The other paper referred to was presented by Luther H. Gulick, M. D., director of physical training for the public schools of the city of New York, and has for its title "Tuberculosis and the public schools." Doctor Gulick mentions four steps to be taken in protecting the schools from the disease. They are, first, the detection of tuberculosis among the pupils, which must be effected by a more thorough medical inspection than the perfunctory examination now

usually made; second, the detection of tuberculosis among teachers and prospective teachers. In a large number of American cities, he says, principally in the West, persons having tuberculosis are not allowed to teach in the public schools; and here also the detection of the disease depends upon the thoroughness of the medical examination, which sometimes is performed carefully while in other cases it is not.

The presence of tuberculosis among teachers must be regarded as of the utmost danger to the community—of more danger than is the presence of tuberculosis in any other class of persons, for they, even with the utmost care as to the disposal of sputum, will cough in the air, and so expose every pupil in the room to contagion.

The third step advocated by Doctor Gulick is the instruction of the pupils themselves “with reference to the fundamental facts regarding tuberculosis.” This is to be effected by giving instruction, at first, in individual hygiene in such a manner that the pupils will understand and remember it, and later in the course the instruction should include personal, social, and community hygiene. The instruction relating to tuberculosis would form part of the course in physiology and hygiene which, in accordance with the legal requirements of the several States, extends practically through all the years of the school life. It will begin with simple facts within the child’s knowledge and be gradually extended from year to year, inculcating cleanly and healthful habits, until it ends with including public hygiene—the purity of waters, the cleanliness of streets and buildings, and the lighting, heating, and ventilation of rooms.

The fourth step in the preventive propaganda suggested by Doctor Gulick is the instruction of prospective teachers with regard to tuberculosis, in which, he adds, they are at present inadequately instructed at the normal schools.

Besides these four specific or direct attacks upon tuberculosis, Doctor Gulick suggests other indirect means of preventing the spread of the disease, which he discusses under the heads of ventilation, exercise, playgrounds and playtime, and dust-free school buildings.

FUTURE CONGRESSES.

Among the congresses announced for the coming year (1910) are: *The Third International Congress on Home Education*, to be held in Brussels, 1910, in connection with the universal exposition. At the request of the Belgian Government an American committee has been formed to cooperate with the organizing committee in Belgium in the preliminary plans for the congress. Prof. M. V. O’Shea, of the University of Wisconsin, has consented to act as chairman of

the American committee, a service which he rendered, also, in preparation for the first congress of the series, which was held at Liège in 1905.

The International Congress on Administrative Sciences.—This Government has been notified that an international congress for the discussion of administrative sciences will meet July 28–31, during the exposition of 1910 at Brussels, under the patronage of the Belgian Government, the Belgian minister of the interior being the honorary president of the congress, while the other ministers of state will represent their respective departments in furthering its objects.

The circular issued by the organizing committee of the congress recites that the conception of the functions of public administration has completely changed within the last few decades. The general governments of the various countries and their subordinate divisions, particularly the cities and communes, have undertaken new duties and responsibilities which are constantly increasing and becoming more complicated and delicate. Hence, the attention which is being given to administration as a science by savants as well as by men of affairs has increased to such an extent that in many countries the universities have established special faculties of political and administrative sciences to give formal instruction in these branches, while cities give exhibits of their methods of conducting municipal affairs at expositions, and even the general public now seeks to familiarize itself with the principles of administration. It seems to the committee, therefore, that the time has come to synthesize this general movement in an international congress at which all matters relating to public administration, its organization, support, personnel, and methods should be discussed and compared. Accordingly, the aim of this congress is to bring together all those who, by their position or duties, or by the nature of their studies, are especially interested in public affairs, and it is hoped that the best administrators of all countries will take occasion of the congress to give the results of their experience and studies.

The congress being international, only questions of general interest affecting the greatest number of countries will be discussed, those which concern only some particular country being excluded.

The five or six volumes of reports of the proceedings of the congress, which will be published in French, Dutch, English, and German, will afford, it is believed, a very complete and practical compendium of administrative science.

Third International Congress on School Hygiene.—In Volume I of the report of this bureau for 1907 a report was given of the proceedings of the Second International Congress on School Hygiene, which was held at London August 5 to 10, 1907. The third congress will meet at Paris, France, August 2–7, 1910. From the “statute” or

constitution of the congress it is learned that all persons interested in school hygiene may become ordinary members of the congress upon payment to the treasurer of the required fee (the equivalent of 25 francs).^a

The texts of papers which members propose to read (and this privilege is confined to members who have paid their subscriptions) must be sent to the general secretary at least two months before the meeting of the congress, and each should be accompanied by a short résumé which can be printed and distributed to members before the opening of discussion. Papers should not exceed 2,000 words in length and the résumés 300. While the papers presented may be written in any European language, preference will be given to French, German, and English, and papers written in other languages than these should be accompanied by a résumé written in one of them. Only those papers will be read at the congress which shall have been sent to the general secretary two months previously, and they must not have been published elsewhere.

The congress will be divided into various sections with the usual officers as follows: (1) Buildings and school furniture; (2) hygiene of residential institutions; (3) medical inspection of schools and the individual records, practical results; (4) physical instruction and training; (5) hygiene of the school child, prophylaxis of contagious diseases at school, school diseases; (6) out of school hygiene, open-air schools, vacation colonies, etc.; (7) the teaching staff, its hygiene and relation with the homes and school doctors; (8) teaching of hygiene to the teachers, scholars, and parents; (9) time-tables and methods of education in their relation to school hygiene; (10) special schools for abnormal children.

Standing committees in connection with the congress have been formed in the various States of Germany, and in England, Austria-Hungary, Belgium, Bulgaria, Cuba, Denmark, the United States, Finland, Greece, Italy, Japan, the Grand Duchy of Luxemburg, Norway, Sweden, Portugal, Roumania, Russia, and Switzerland, while similar committees are in process of formation in Argentina, Brazil, Chile, Spain, Holland, Mexico, Peru, and Servia. From this statement will appear the importance which is attached to the subject and the widespread interest manifested in it in all parts of the civilized world. The officers of the proposed committee for the United States are: President, Dr. John H. Musser; vice-president, Dr. Arthur T. Cabot; secretary and treasurer, Dr. Thomas A. Storey. The other members, who are styled the "executive committee" in the circular of announcement at hand, number 231, include presidents of

^a Applications for membership should be addressed to the general secretary, M. le Dr. Dufestel, 10, Boulevard Magenta, Paris, and postal orders or checks for the admission fee to the treasurer, M. le Dr. de Pradel, 120, Avenue Émile-Zola.

universities, professors of education, professors of physiology and hygiene in medical schools and universities, anthropologists, practicing physicians, school superintendents and principals, and professors of physical training from all parts of the country.

XVI. INTERNATIONAL EDUCATION RELATIONS.

THE RHODES SCHOLARSHIPS—CONCESSION AS TO QUALIFYING EXAMINATION IN GREEK.

[Copy of letter sent to members of the American committees of selection.]

SEYMOUR HOUSE, WATERLOO PLACE,
London, S. W., February, 1909.

DEAR SIR: As you are aware, the University of Oxford exacts a certain minimum of Greek of all members of the university who intend to proceed to the ordinary degree.

Greek has therefore formed one of the subjects for the examination, accepted as exempting from responsions, which candidates for the Rhodes scholarships are required by the trustees to pass in order to become eligible. There is no immediate probability that the demand of the university in this particular will be changed. It has, however, been frequently pointed out that even the small amount of Greek required for this qualifying examination prevents a proportion of otherwise desirable candidates in the United States from competing for the Rhodes scholarships. It is also claimed that some such students, who are unwilling to prepare the required Greek on the mere chance of getting a scholarship, would willingly do so when once the scholarship had been definitely awarded to them.

The trustees are anxious, as far as possible, to bring the scholarships within the reach of every student of marked ability. They have accordingly decided that any candidate from the United States who has passed the qualifying examination in Latin and mathematics shall be eligible, even though he may not have passed in Greek.

It must be distinctly understood, however, that Oxford University has not changed its requirements. Responsions, or its equivalent (and in either case Greek is a necessary subject), must still be passed by all who wish to follow the ordinary curriculum.

American students who pass the Rhodes qualifying examination in all three subjects (Latin, Greek, and mathematics) will be in the future, as heretofore, exempt from responsions. Those, however, who qualify in Latin and mathematics only will be obliged to satisfy the

Oxford responsions examiners in Greek before they can offer themselves for any examination which presupposes responsions.

Moreover, it may be taken as certain that the Oxford colleges which accept scholars so selected will expect them to pass the Greek of responsions on coming into residence. A responsions examination is held at Oxford toward the end of September in each year. Rhodes scholars, therefore, who have not passed the qualifying examination in Greek should be prepared to come to Oxford in time for this examination. As it is expected that hereafter the election of scholars will be completed by the end of December in each year, a scholar-elect will have nine months in which to master the amount of Greek required. Experience has shown that this allows ample time for a student of ability.

This concession is made to meet exceptional cases, but the trustees hope that the great majority of candidates will still pass the qualifying examination as heretofore in all three subjects, since thus the scholar will have no further trouble with Greek, but will be at liberty to devote the nine months subsequent to his election to subjects more germane to the line of study which he proposes to follow at Oxford.

Believe me, yours, very truly,

GEO. R. PARKIN.

OXFORD LEGISLATION REGARDING COLUMBIA STUDENTS.

In a meeting of the convocation of Oxford University held on May 12, 1908, the following decree with reference to students of Columbia University was promulgated:

1. That any member of Columbia University, New York, who, having satisfied the examiners in elementary Greek for admission, shall also have either received the grade of B or higher for courses in Greek aggregating at least six points, or received the grade of C or higher for courses in Greek aggregating at least ten points, shall be deemed to have shown a sufficient knowledge of Greek as required by the provisions of Statute II, section 9, "On students from foreign universities" (cl. 11).

2. That any member of Columbia University, New York, who shall have pursued at that university a course of study extending over two years at the least, and shall have completed at least 72 points toward the degree of bachelor of arts or bachelor of science, including all the prescribed subjects, and shall have received throughout the grade of C or higher, shall be eligible for admission to the status and privileges of a foreign junior student.

3. That any member of Columbia University, New York, who shall have pursued at that university a course of study extending over three years at the least, and who shall have completed at least 94 points toward the degree of bachelor of arts or bachelor of science, including all prescribed work, and shall have obtained either (a) third year or final general honors, or (b) the degree of bachelor of arts or bachelor of science with final departmental or divisional honors, shall be eligible for admission to the status and privileges of a foreign senior student.

AMERICAN-SCANDINAVIAN SOCIETY.

On November 21, 1908, there was formed in New York City the American-Scandinavian Society. Its object is to encourage and organize cultural intercourse between the United States and Scandinavia, especially by facilitating and promoting the following two forms of intercourse:

1. Mutual visits of lecturers on scientific, professional, social, and other questions. The lecturers may be professors, teachers, or others.

2. Mutual visits of students, the word "student" being used in its widest sense. These students may themselves be teachers, who may study educational features, and take certain courses at the universities or technical institutes; for Scandinavians visiting this country a study of the English language will always be one of the objects of their visit. The students may also be undergraduates or graduates from colleges or technical schools, completing their education by a course at the foreign institution of learning. Finally, the students may be young men wishing to study industry, art, commerce, agriculture, or some profession.

UNITED STATES UNIVERSITIES CLUB, ARGENTINE REPUBLIC.

The Bureau of Education has received information, through the Secretary of State, that a social club with the title "The United States Universities Club" was organized in Buenos Aires on August 4, 1909, at the American legation. There were enrolled 130 members, of whom 66 were present, representing 39 colleges and universities in the United States, but the membership includes Argentines as well as North Americans. Hon. Charles H. Sherril (Yale '89), the American minister to Argentina, was elected president of the club and Mr. Charles Lyon Chandler (Harvard '05), secretary.

In his address upon this occasion Mr. Sherril spoke of the great esteem felt among American university graduates for the name of the Argentine President, Sarmiento, because of his great service to education in Argentine Republic, but especially because of his admiration of the United States and the North American system of education, which led him to bring American teachers to his own country to establish a similar system there. The club was really founded, Mr. Sherril stated, in memory of President Sarmiento. In his letter to the Secretary of State, Minister Sherril expresses the hope that the club will be a factor in increasing the sympathetic understanding between Argentine Republic and the United States, and comments upon the cordial manner in which the Argentine young men received the plan and purposes of the club and their activity as members.

The North American universities and colleges mentioned as being represented were the following: Harvard, Yale, Cornell, Columbia, Pennsylvania, Dartmouth, Williams, Brown, United States Naval

Academy, Holy Cross, Pennsylvania College, Ohio State, Ohio Wesleyan, Massachusetts Institute of Technology, universities of Illinois, Michigan, and Chicago, New York College of Dentistry, Bates College, Dickinson, Mount St. Mary's College, Albany Medical College, Chicago Veterinary College, Pratt Institute, Northwestern University, Bucknell University, Drexel Institute, Butler College, German Wallace College, Iowa College, Hamline University, Columbia University, Rensselaer Polytechnic, Boston University, and University of Missouri.

CHINESE STUDENTS IN THE UNITED STATES.

By a joint resolution approved May 25, 1908, Congress provided for the remission of a portion of the Chinese indemnity for losses and expenses incurred during the so-called "Boxer disturbances" in China in 1900. The arrangements approved by the President provide for the remission of the following amounts in each of the years indicated:

Year.	Amount remitted yearly.	Year.	Amount remitted yearly.
1909.....	\$483,094.90	1925.....	\$790,195.99
1910.....	483,094.90	1926.....	790,196.00
1911.....	541,198.78	1927.....	790,195.99
1912.....	541,198.78	1928.....	790,196.00
1913.....	541,198.78	1929.....	790,195.99
1914.....	541,198.78	1930.....	790,196.00
1915.....	724,993.42	1931.....	790,195.99
1916.....	790,196.00	1932.....	1,380,378.35
1917.....	790,196.00	1933.....	1,380,378.34
1918.....	790,196.00	1934.....	1,380,378.34
1919.....	790,195.99	1935.....	1,380,378.35
1920.....	790,196.00	1936.....	1,380,378.43
1921.....	790,195.99	1937.....	1,380,378.43
1922.....	790,195.99	1938.....	1,380,378.35
1923.....	790,195.99	1939.....	1,380,378.34
1924.....	790,196.00	1940.....	1,380,378.36

In his message to Congress recommending the remission of a portion of the indemnity the President said:

This nation should help in every practicable way in the education of the Chinese people, so that the vast and populous Empire of China may gradually adapt itself to modern conditions. One way of doing this is by promoting the coming of Chinese students to this country and making it attractive to them to take courses at our universities and higher educational institutions. Our educators should, so far as possible, take concerted action toward this end.

The action of Congress was communicated to Prince Ch'ing, president of the board of foreign affairs of China, by the American minister, Mr. Rockhill, under date of July 11, 1908. In his letter of acknowledgment, dated July 14, 1908, the president of the board of foreign affairs of China says:

The Imperial Government, wishing to give expression to the high value it places on the friendship of the United States, finds in its present action a

favorable opportunity for doing so. Mindful of the desire recently expressed by the President of the United States to promote the coming of Chinese students to the United States to take courses in the schools and higher educational institutions of the country, and convinced by the happy results of past experience of the great value to China of education in American schools, the Imperial Government has the honor to state that it is its intention to send henceforth yearly to the United States a considerable number of students there to receive their education.

Under the same date the board of foreign affairs notified the American minister that—

It has now been determined that from the year when the return of the indemnity begins 100 students shall be sent to America every year for four years, so that 400 students may be in America by the fourth year. From the fifth year and throughout the period of the indemnity payments a minimum of 50 students will be sent each year.

As the number of students will be very great, there will be difficulty in making suitable arrangements for them. Therefore, in the matter of choosing them, as well as in the matter of providing suitable homes for them in America and selecting the schools which they are to enter, we hope to have your advice and assistance. The details of our scheme will have to be elaborated later, but we take this occasion to state the general features of our plan, and ask you to inform the American Government of it. We sincerely hope that the American Government will render us assistance in the matter.

Under date of December 29, 1908, the President of the United States issued instructions directing the Commissioner of Education of the United States—

to aid in all appropriate ways within his power in the carrying out of the plans of the Chinese Government for the education of students in America.

The following proposed regulations for the students to be sent to America were formulated by the Chinese Government:

I. General statement.

The students to be sent to America are to be supported out of the indemnity fund remitted by the United States. It is proposed to memorialize the Throne fixing the number of students to be sent abroad, with a statement of the general arrangements made for them, and at the same time to notify the American minister.

The board of foreign affairs will be responsible for the establishment of the training schools and the appointment of the superintendent of students.

The board of education will be responsible for the examination of the students after their graduation, as the board of foreign affairs may invite the board of education.

The officials appointed by the board of foreign affairs and the American legation shall be jointly responsible for the selection of the students who are to be sent to America, and for their distribution in American educational institutions.

II. The general purpose.

The aim in sending students abroad at this time is to obtain results in solid learning. Eighty per cent of those sent will specialize in industrial arts, agri-

culture, mechanical engineering, mining, physics and chemistry, railway engineering, architecture, banking, railway administration, and similar branches, and 20 per cent will specialize in law and the science of government.

III. *Qualification of students.*

The requirements will be—

- (a) General intelligence.
- (b) Good character.
- (c) Good health.
- (d) Respectable social position.
- (e) Suitable age.
- (f) Knowledge of Chinese sufficient to write an essay of several hundred characters.
- (g) General knowledge of Chinese classical literature and history.
- (h) Knowledge of English sufficient to enable the student to enter an American university or technical school.
- (i) The completion of a preparatory course in general studies.

IV. *The method of nomination of candidates.*

The board of education will choose the most promising students from all the schools and present them for examination. The board of foreign affairs will also call for applications. Students of both these classes must be fully up to the required standard or they will not be accepted as candidates. (Detailed regulations will be drawn up later.)

V. *The examination and choice of students.*

Officials appointed by the board of foreign affairs and one official appointed by the American legation will consult together and report to the board the detailed method of procedure. There shall be three tests:

- (a) Candidates must be inspected as to their physical condition by western trained physicians.
 - (b) They must pass in Chinese.
 - (c) They must pass in English and general branches.
- (Detailed regulations will be issued later.)

VI. *The training school.*

The board of foreign affairs will establish a training school for students going to America (or branch schools will be established at Tientsin, Hankow, and Canton for the convenience of students from the different provinces). All the accepted candidates will enter this school or schools. Those sent out the first year will be trained for six months and those sent hereafter will be trained for one year. During this time the character and ability of the students will be closely inspected and only those found satisfactory will be sent abroad. Those found unsuitable will be rejected. (Detailed regulations will be issued later.)

VII. *The superintendence of the students abroad.*

At Washington, Chicago, or some other suitable place centrally located the office of the general superintendent will be established. Some one who has graduated from an American university and who has a reputation for ability will be appointed superintendent of students, and four or five assistants will be appointed to attend to the placing of the students, to their finances, and to inspect their studies. These will make regular reports. (Detailed regulations will be issued later.)

VIII.

After the students have completed their courses of study and obtained their diplomas they will be presented by the board of foreign affairs to the board of education to be examined according to the regulations, and they will receive rank as may be determined by the board of education.

NUMBER OF CHINESE STUDENTS IN THE UNITED STATES.

The following statement respecting the education of Chinese students in the United States is taken from an article in the Outlook for November 28, 1908, by Mr. George Marvin, who has been for some time in official connection with the Chinese Government:

The disposition on the part of the Chinese Government to send picked students to America for their education, although interrupted for many years after the first set of 20 came in 1872, has since 1890 shown a comparatively steady growth. During the past year 155 Chinese students were maintained at various educational institutions in this country on foundations provided either by the imperial or the provincial governments. Out of this number, 71 are under the charge of the imperial Chinese legation at Washington; 27 are under the direction of Chang-Chuan, commissioner of education for the viceroyalties of Hupuh and Kiangnam; 57 others have been during the past year under the direction of Doctor Tenny, at present Chinese secretary of our legation at Peking. These last, although coming from various parts of the Empire, all received their elementary education at the Peyang College, in Tientsin, of which Doctor Tenny was formerly principal. At the request of Yuan-Shih-Kai, then viceroy of Chihli, of which province Tientsin is the chief city, Doctor Tenny in 1906 assumed charge at Cambridge of the Peiyang candidates sent to America, including those now in Harvard and the various other colleges where, at his suggestion, they were quartered. Since Doctor Tenny's return in July last to Peking, his position has been filled by the appointment of Mr. H. F. Merrill, for many years commissioner of customs at Tientsin.

Quite apart from this official recognition of the advantages of an American education, many Chinese families send their sons, at their own expense, to schools and colleges in this country. It has been impossible to procure exact statistics of the number of these privately supported students, but, according to the best advices obtainable at the Chinese legation, there are about 200.

PERSONNEL OF EXCHANGE PROFESSORS.

On September 3, 4, and 5, 1908, Dr. Nicholas Murray Butler, president of Columbia University, New York City, lectured before the faculty and guests of the University of Copenhagen, Denmark. The subjects of the lectures were "The American as a political type," "The American apart from his Government," and "The American and the intellectual life." These lectures were the second of a series in the programme for an exchange of professors between American and Danish educational institutions. The American minister to Denmark reports that—

the effect was good. The leading journals gave full accounts of the lectures, and from many sources I have heard favorable comments on the satisfactory

results to be accomplished by this scheme of university professional interchanges.

The trustees of Columbia University have appointed Prof. Otto Jespersen, Ph. D., of the University of Copenhagen, professor of English philology in Columbia for the academic year 1909-10. He will offer two lecture courses—one on phonetics, open to all language students, and one on historical English grammar. He will also give a seminar course on special problems of English syntax. (Columbia University Quarterly, March, 1909, p. 217.)

The Kaiser Wilhelm professor at Columbia University for 1909-10 is Dr. Karl Runge, of Gottingen. Doctor Runge's first original work was in pure mathematics. His most recent specialty, and one upon which he will give a course at Columbia, is the study of graphical methods in physical and technological research.

Prof. Eugen Kühnemann, of Breslau, served at Harvard University during the year 1908-9 as visiting German professor of German literature, and Prof. Joseph Redlich, of Vienna, was appointed lecturer on government for the second half of the academic year. Dr. W. M. Davis, professor of geology at Harvard, served at the University of Berlin during the year. Doctor Davis lectured during the first semester.

Prof. George Foot Moore, Frothingham professor of the history of religion, has been selected as Harvard exchange professor at the University of Berlin for the academic year 1909-10.

From the German universities Harvard has selected Edward Myer, professor of ancient history in the University of Berlin, to teach at Harvard during the first half year.

Prof. Bliss Perry, of the department of English of Harvard University, has been appointed Harvard lecturer at the University of Paris and other French universities for 1909-10.

INTERNATIONAL BUREAU OF NATIONAL TEACHERS' ASSOCIATIONS.

The Berliner Tageblatt reports that there has been in existence, since 1905, an international union of national teachers' associations in Europe. It held its last meeting in London. To this union belong the German National Teachers' Association, with 116,000 paying members; the English Teachers' Union, with 61,000; the Bohemian society, with 8,000; the Bulgarian society, with 4,000; the Union of Netherlandish Teachers, with 8,000; the Holland Teachers' Guild, with about 8,000; the French Lay Teachers' Association, with 60,000; the Belgian, with 6,500; and the Association of Luxemburg, with 1,500, making a total of 273,000 paying members. The following associations have indicated their desire to join the union: The Italian, Norwegian, Danish, Spanish, Polish, Swiss, Hungarian, and

Croatian teachers' associations. In the last annual report of the bureau, or central office of the union, the activities of each association during the preceding year are given. A brief synopsis of the report may show that, despite all national animosities, there are a number of important points of contact in the professional aspirations of the teachers of Europe to aid in securing a better mutual international understanding.

The English union chiefly occupied itself with the proposed revision of the school law then before Parliament. Another object in view of the English teachers was the diminution in the size of the classes, which in many places still have between 60 and 80 pupils; adequate pay for teachers—the universal demand in every civilized nation—engaged the English teachers also.

The Belgian Teachers' Association is waging a war with the clericals in favor of a system of secular common schools open to all children of whatever religious denomination. Special attention was given in this Kingdom to a revision of the law dealing with teachers' pensions.

The Bulgarian Teachers' Society passed through a crisis. A former government considered teachers dangerous to the State, and submitted to Parliament two bills, subsequently passed, which prohibited teachers from being or becoming members of the teachers' society, and likewise from participating in political affairs (elections). The teachers would not submit to a loss of the rights and prerogatives of citizenship, and accordingly held meetings in which the two laws were denounced and resolutions passed which called for disobedience to these laws so hostile to the profession. The Government replied by discharging from office 500 delegates to the meetings of the society, but it did not dissolve the latter. Happily, a more liberal government coming into power at the beginning of 1908, all the discharged teachers were promptly reinstated, and the laws concerning the political rights of teachers were revised and purged of their objectionable features.

In Italy, the teachers secured an increase of the minimum salary from 560 to 750 lire (\$108 to \$145), and an increase of the maximum salary from 1,350 to 1,500 lire (\$260 to \$290), with annual increases of 100 lire for a number of years. Success in Italy, as well as in other countries, was possible only through united action on the part of the teachers, who begin to recognize their own power as intellectual leaders in cities, towns, and villages.

In France, also, an improvement in wages was secured through the efforts of the National Association of Lay Teachers. This association demanded for every school district the appointment of a professional commission, which is to take part in the administration of schools, and deal with questions of discipline, course of study, text-

books, and other exclusively pedagogical affairs. The Government has acknowledged these demands in principle, and has decreed the appointment of such commissions, though with prerogatives much more limited than originally demanded.

In Denmark the National Teachers' Union aims at an improvement in the teachers' professional preparation, and at better school supervision. Their wishes concerning more liberal wages have been met to a gratifying degree, since the Government has granted a uniform increase of 25 per cent.

The Berliner Tageblatt closes its account of the London international meeting with the following words:

Everywhere the same picture: The teachers in battle array! The teachers fighting for bread, for political liberty and social advancement, for the liberty of the school against the attacks of state and church, and for a just appreciation and valuation of their labor and their honor.

FOREIGN STUDENTS IN GERMAN UNIVERSITIES.

During the summer semester of 1908 there were 3,594 foreign students enrolled in the 21 German universities, according to a statement in the *Kölnische Zeitung*, against 3,869 in the winter of 1907-8, 3,766 in the summer of 1907, 3,889 two years ago, 2,819 four years ago, and 1,200 in 1881. In comparison with the winter semester of 1906-7, during which the number of foreign students reached the maximum, to wit, 4,151, the last enumeration shows a decrease of 557, which is partly attributable to the withdrawal of 227 Russians in consequence of more rigorous conditions of admission.

The decrease in the number of foreign students can best be shown relatively. They formed 7.5 per cent of the entire number of enrolled students in the winter of 1908-9, 8.3 per cent in the summer of 1907, 9.2 per cent in the winter of 1907-8, and 8.6 per cent in the summer of 1906. Asiatic students, mostly Japanese, increased from 144 to 181; also the students from southern and southeastern Europe increased in number, except from Greece. Bulgaria sent 150 (142 in the previous year); Roumania, 92 (88); Servia, 66 (63); Turkey, 43 (39); Italy, 41 (36); Switzerland, 293 (282); Belgium, 24 (18); Netherlands, 58 (54); France, 55 (52); Austria-Hungary, 660 (654). Decreases are recorded among the Russians, 1,373 (1,600 in the previous year); Englishmen, 148 (151); Norwegians, 32 (36); Americans, 252 (261). Europe as a whole sent 3,148, against 3,349 in the previous year.

Most of the foreigners studied medicine, 948 (958 in the previous year); 881 (915) studied philology and history; 604 (651) mathematics and natural sciences; 488 (511) administration and political economy; 426 (479) law; 190 (197) theology; 29 dentistry; 16 pharmacy; 12 forestry.

The foreign students show preferences for certain universities, as follows:

Number and per cent of foreign students in the different German universities.

University.	Number.	Per cent.	University.	Number.	Per cent.
Berlin.....	869	13.3	Würzburg.....	62	4.7
Leipzig.....	504	12.3	Marburg.....	80	4.2
Heidelberg.....	237	11.6	Breslau.....	75	3.2
Jena.....	158	9.7	Bonn.....	124	3.6
Halle.....	207	9.3	Greifswald.....	32	3.6
Munich.....	559	8.9	Erlangen.....	32	3.0
Königsberg.....	98	8.6	Rostock.....	19	2.6
Göttingen.....	155	7.7	Tübingen.....	46	2.6
Gießen.....	68	5.6	Kiel.....	35	2.5
Strassburg.....	93	5.5	Münster.....	10	.6
Freiburg.....	134	5.1			

PROPOSED ANGLO-AMERICAN EXCHANGE OF STUDENTS.

An influential committee has been formed in Great Britain to promote international exchange of students between the universities of Great Britain, Canada, and the United States. Premier Asquith and Lord Strathcona head the committee, and included in it are Lord Curzon, chancellor of the University of Oxford; Mr. Balfour, chancellor of the University of Edinburgh; the lord chancellor, and other distinguished men, including a large representation of professors from the British universities. Committees have not been yet organized in the United States and Canada, but leading educators have promised their cooperation. The plan aims at providing opportunities to students of the three countries to obtain some real insight into the life, progress, and customs of other nations, with a minimum of inconvenience to their academic work at the least possible expense.

It is also proposed to establish two students' traveling bureaus, one in New York and one in London; an American secretary (resident in New York) and a British secretary (resident in London), both of whom shall be college men, appointed to afford every facility to any graduate or undergraduate of any university who wishes to visit the United States, Canada, or the United Kingdom for the purpose of obtaining an insight into the student, national, and industrial life of those countries.

PROVISION FOR FOREIGN STUDENTS.

Columbia University, New York City, has received from Mr. Niels Poulson, of Brooklyn, N. Y., the sum of \$650 for the establishment of an annual fellowship for a student from one of the Scandinavian universities.

Beginning with September 1, 1908, Harvard University has undertaken for a period of ten years to accept as guests of the corporation each year five German students of advanced standing to be selected by

the Prussian ministry of education; the students to have access to all departments of the university free of tuition. (Harvard Graduates' Magazine, December, 1908, p. 280.)

The following gifts for the support of Chinese students at Harvard are reported: Henry L. Higginson, \$2,000; Miss Ellen F. Mason, \$1,500; Mrs. T. J. Bowlker, \$1,500.

There has been established in Göttingen, Germany, the Böttinger-Studienhaus, which is intended to serve not only as a bureau of information where foreign students may obtain all necessary facts with regard to the German universities and technical schools, but also to assist such students to secure suitable accommodations in German families. It is intended to maintain in the Studienhaus courses of instruction in German. (Columbia University Quarterly, December, 1908, p. 81.)

A scholarship of \$1,500, to be held at Oxford, Cambridge, or London University, for the year beginning October, 1910, will be awarded to an American woman by the General Federation of Women's Clubs of America. The candidate for the scholarship must be under 27 years of age, unmarried, and a graduate of an American college of good standing. She must undergo the same qualifying examinations as are provided for men competing for Cecil Rhodes scholarships.

NATIONAL ASSOCIATION OF COSMOPOLITAN CLUBS.

The first international or cosmopolitan students' club was started at the University of Wisconsin in 1903. Since then similar clubs have been formed at 16 other universities. Each of the clubs is composed of practically all of the foreign students at the university, with some Americans. These clubs have been organized into a body called the "National Association of Cosmopolitan Clubs," which held its second annual convention at Ann Arbor December 31, 1908-January 2, 1909. From an article in the Independent of January 28, 1909, by Louis Lochner, the first president of the association, it appears that the total membership of the clubs is about 1,500, and that 50 countries are represented. The following extracts from Mr. Lochner's article show the objects and activities of the clubs:

The purpose of these clubs is to bring together college young men from different countries; to aid and direct foreign students coming to America to learn the customs, view points, and characteristics of other nationalities; and to establish international friendships.

One of the most significant events [at the convention] was the taking of initial steps toward an affiliation of the association with the International Federation of Students of Europe, better known as "Corda Fratres." This organization, which has a membership of 63 chapters or consulates, representing 15,000 students, aims to do for students at European universities what the Association of Cosmopolitan Clubs endeavors to accomplish in America. * * * The work

will thus be on an international basis, and undoubtedly much more effective. Students coming from Europe will be received and aided by members of the association, and members going to Europe will be similarly aided and guided through the consulates of Corda Fratres. * * *

By its enrollment as an auxiliary of the American Peace Society and its recommendation to individual members to become correspondents of the Lake Mohonk conference on international arbitration the Association of Cosmopolitan Clubs took another great step in advance during the Ann Arbor convention. * * *

The activities of the cosmopolitan clubs are numerous and varied. Lectures on international topics, informal discussions on subjects of foreign interest, receptions to the newly arrived foreigners at the beginning of the college year, musicales at which national songs are the pièces de resistance, and occasional social functions are some of the forms which these activities take. * * *

As an agency for promoting the final establishment of permanent peace among the nations, there is nothing in the educational sphere likely to bear richer fruit. The foreign students for the most part come from the very best families. Many are sent by their governments. They will in many cases become leaders of public opinion and even of the political spirit and policies of their nation. In proportion as they can be brought in closer contact with their fellow-student of different race or nationality, and learn that war and hostility are thoughts remote from the rising generation, will the hopes for the realization of world peace be increased.

The third convention of the association will be held at Cornell during the Christmas holidays of 1909.

The officers of the association are: Louis P. Lochner, University of Wisconsin, president; Bjarue H. Graff, University of Wisconsin, secretary-treasurer; Frank D. Mitchell, Cornell University, recording secretary. The Cosmopolitan Annual is the official organ of the association.

"CORDA FRATRES"—INTERNATIONAL FEDERATION OF STUDENTS.

[Founded at Turin (Italy), Nov. 15, 1898; proclaimed at Rome, the Roman Forum, Nov. 24, 1898; reorganized at Liège (Belgium), Sept. 4, 1905.]

Official list of the organization.^a—President founder, Dr. Efsio Giglio Tos, Turin. President of honor, Av. Camille, Provansal Gap (Hautes Alpes). General secretaries, Dr. Angelo Andra; Dr. Luigi Mosca. Central International Bureau of Administration and Propaganda, Budapest, IV Kaplony-utca 7. President of the bureau, Dr. Etienne de Zsembry, Budapest. General secretary of the bureau, Dr. Zoltan de Hindy, Budapest.

Fundamental articles of the federation.—(Approved at the First International Congress of the federation at Turin, Nov. 12–20, 1898.)

I. The name of the federation is "International Federation of Students," translated into the national language, and preceded by "Corda Fratres" as the motto of the federation itself.

^a Only the officers given in this translation. There are 63 local consulates distributed among most of the principal university centers of Europe.

II. The principal object of the International Federation of Students is to protect and promote the idea of solidarity and of fraternity among the students.

III. Any student has the right to become a member of the federation provided he be registered in a university or institution of higher learning, regardless of his religious or political ideas.

IV. Each member, upon his entrance into the federation, pledges himself upon his honor to employ unceasingly such means as his social position, his intelligence, and his activity afford to promote the spirit of international union among the youth, and to second all the manifestations which he may believe useful in order to dissipate from any class of persons whatsoever the prejudices and hatred which render states reciprocally hostile and always on a war footing.

V. The International Federation of Students proposes also to second by all the means in its power the work of peace and arbitration between nations.

VI. It is also the object of the federation to put in correspondence the students themselves, and in particular those who devote themselves to the same branch of learning, in order to facilitate the means of information and scientific research, of which they may eventually have need, both before and after the doctorate.

VII. To insure reciprocally hosts and friends in the large cities, distantly located, upon the occasion of travels, individual and collective, in foreign lands—travels which will thus be more easily undertaken and accomplished.

VIII. The fundamental principles, unanimously accepted as heretofore mentioned, shall regulate the federation and can not be changed.

Statutes.—(Drafted at the Third International Congress at Liege, Sept. 4–8, 1905, and modified at the Fourth International Congress at Marseille, Aug. 31–Sept. 5, 1906.)

1. The federation proposes: First, to occupy itself with questions of general interest to students, always excepting political and religious questions; second, to provide its members with every intellectual and material advantage; third, to facilitate travel for instruction and sojourn in foreign countries; fourth, to promote the institution of chairs of languages and literature for the benefit of foreign students during vacation; fifth, to promote congresses, reunions, and international fêtes among the students; sixth, to promote sports among its members.

2. The official language of the congress of the federation shall be French and that of the country where the congress may be held.

3. The emblem of the federation shall be Minerva on a white background, bearing the inscription “‘Corda Fratres’”—International Federation of Students, founded at Turin, November 15, 1898; pro-

claimed at Rome, *Forum Romanum*, November 24, 1898; reorganized at Liege September 4, 1905."

4. The federation shall be composed of (1) actives, (2) alumni, (3) adhering members, (4) benefactors, (5) honorary members. Membership in "Corda Fratres" shall not be lost except by expulsion or resignation of the member.

5. Active members are all those registered at a university or institution of higher learning who shall enroll with the federation.

Students' associations as such may enter the federation. In such case all the members of the association become active members of the federation. When the students' associations of the same political state shall be grouped in a national union such a union may adhere to the federation.

6. Alumni are all actives who, after having terminated their studies, express the desire to remain in the federation.

7. Adhering members are all those who, already having been enrolled with the federation as actives, after having terminated their studies, do not intend to continue in the active life of the federation. They have only the right to wear the badges and participate in all assemblies of "Corda Fratres."

The adhering associations shall be obliged to contribute each year to the central bureau the sum of 20 francs if they have less than 50 members; 40 francs if they have from 50 to 200 members. If they have more than 200 members, the contribution shall be 40 francs and in addition 20 francs for each 500 or fraction of 500 members over and above 200 members.

The contribution of alumni shall be 3 francs, likewise collected at the consulate.

8. Benefactors are all those who, admitted by a consulate or an association, contribute for the benefit of the federation the sum of 20 francs.

9. Honorary members are those who shall have been deemed of great merit by the federation and to whom a consulate shall have granted such a title.

10. The only contribution of actives shall be 5 francs, collected by a local consulate.

11. All the students of a university city shall be represented by a local bureau called a "consulate," formed and administered according to local customs.

There can be only one consulate in any one university city.

The consulates shall be elected by all the members of the federation of the same city, whether they be direct adherents of the federation or become active members by virtue of the adhesion of the association to which they belong.

12. The consulate shall be composed of consuls, active members, and alumni, enrolled in each class.

13. Each member of the federation must register himself at the consulate in the city where he pursues his university course. Enrollment at any other consulate has no value.

14. Each consulate shall have the right to one vote at the congress.

15. The consulates shall maintain direct communication with the central international bureau and with the president.

16. The central bureau shall be elected at the congress by the members of the federation. In default of this, it shall be organized by the consulate of the city where the congress shall have determined that the bureau shall be.

The bureau shall be composed of a number of secretaries in order to insure its proper working.

17. Each congress shall elect a president of the federation, distinct from the central bureau.

18. The bureau shall be charged with the work of propaganda and of the administration of the federation.

The president shall be charged with the moral direction.

19. The consulates shall remit directly one-half of the contributions to the central bureau.

20. The members of the federation shall assemble together in an international congress at least every two years.

21. At the beginning of the congress the bureau of the congress shall be constituted.

22. Before the close of the congress the probable place and date of the following congresses shall be designated.

23. The central international bureau shall be charged with the publication of the bulletin of the federation, printed in several languages. This shall be sent to all the consulates and to those members of the federation who shall have paid the subscription.

Six international congresses of the federation have been held, as follows: At Turin, 1898; at Paris, 1900; at Venice, 1902; at Liege, 1905; at Marseille, 1906; at Bordeaux, 1907.

CHINESE AND KOREAN STUDENTS IN JAPAN.

[Compiled from the report for the year ending September 30, 1908, of J. M. Clinton, general secretary of the Chinese Young Men's Christian Association, Tokyo.]

There are to-day 5,000 students in Tokyo representing every Province of China. One year ago there were almost double this number. But while the number has decreased, the quality and standard of the students has greatly increased. The number for the past six months has remained almost stationary. There are many reasons for this decrease in numbers. Many who came to Tokyo at first were not real students but came because it was popular to come to Japan. Others

came for "short-term courses." Still others came for political purposes. Now very strict examinations are held both in China and Japan. Every student coming to Japan must first pass these examinations. These restrictions have shut out the incompetent students. All "short-term" schools have therefore disappeared. The Japanese government schools and the large private schools, like Waseda University, will now not admit Chinese students unless they enroll for a term of four or more years. This at once shows the stability of the Chinese students now in Japan. The revolutionary class, so strong at one time, are now not so much in evidence. The Chinese students now here mean business. They have come to complete their courses and they are doing so. During the past year many honors in the various schools have been won by the Chinese students. It is significant that most of these honors have been won by members and students of the Chinese Young Men's Christian Association.

How long this army of 5,000 Chinese students will remain in Tokyo is difficult to say. There are many facts which indicate that they may remain here for a number of years yet. In conversation with the Chinese minister a few days ago he said the Chinese Government was still supporting 2,500 students here and that there were no indications or reasons for decreasing this number in the near future. The Chinese Imperial Government itself has decided to send at least 200 new students to Japan each year for the next five years.

In every sphere above the mere material the Chinese scholar is king in his own community. Many of these students in Tokyo are sons of landed gentry, a class very powerful for good or evil in their native places. Others are sons of officials and merchants and members of the literati. About one-half of the 5,000 Chinese students of Tokyo, as shown above, are supported by the provincial governments, and are selected by competitive examinations. Some are sent by city or village guilds. Others are supported by groups of friends, relatives, or parents. The position of each is gained either by family influence or by the competitive test. Every one, therefore, is a picked man, selected on account of ability or social influence.

Already the new leaven is working. A Chinese writing in a recent issue of the *Westminster Review* says of these men after returning from their studies abroad:

Fairly educated, and having had proper training, the students return from Japan to establish private schools everywhere at their own expense. The work is disinterestedly carried on. Many teachers sacrifice their own fortunes in the enterprise. But they are gaining ground by degrees, especially in normal schools and kindergartens. The antiopium and antifootbinding movements would not have been so general but for the energetic preaching both by tongue and pen of the students returned from Japan. The doctrine in favor of the emancipation of women is spreading daily, and before long the education of the other sex will receive equal attention.

The writer of the article goes on to show how the literature of China is becoming reshaped by the new learning. Thousands of new words are being incorporated into the body of the national vocabulary. "New expressions, new constructions of sentences" are making a revolution in the Chinese literary world. A new activity has laid hold of the pens of ready and able writers, and ideas alive, pulsating with vitality, are being given forth without cessation. The student body is the mainspring of the movement in China; in fact, is the movement.

The Chinese students are great readers. They are not only seeking all the knowledge they can get through the medium of their own language, but are reading books in other languages, especially Japanese, English, French, and German. The association reading rooms are supplied with many of the leading newspapers and magazines, published in Chinese, Japanese, and English.

The stream of Korean young life continues to flow toward the land of the rising sun. And this is true regardless of the fact that there is a strong racial feeling between the two peoples. The Korean students are not coming to Japan because of any love for Japan, but for self-protection and self-preservation. They are willing to come for the sake of the learning they can get. Many have come to learn the secret of Japan's success. Korea is now giving herself up to the acquirements of western civilization. She is now not only trying to learn what Japan can teach her in Korea, but she is sending in great numbers her young men to Japan. There are to-day 700 Korean students in Tokyo alone, enrolled in the various government and private schools. This is an increase of 200 over last year. Men of all ages are coming to Japan to study. Many of them are from 30 to 40 years of age. There are also no less than 100 who are under 18 years of age. The average age of the total number now is about 19, as against 22 of last year. On the whole, a younger class of men and boys are coming.

The educational work of the Korean association has grown in popularity until now more than 100 students are enrolled in its classes. English, Japanese, history, mathematics, and a few other subjects are being taught in the association classes.

BRITISH AND GERMAN UNIVERSITIES IN CHINA.

A British university is to be established in Hongkong, which will limit itself, in the first place, to instruction in medicine and engineering, because these are the two branches of Western science for which at present there is the largest demand in China. A citizen has offered \$135,000, to be used in constructing suitable buildings, on condition that adequate funds, computed at \$500,000, are provided for purposes

of equipment and endowment. An essential feature of the scheme is that all students shall reside in colleges and hostels where they will be constantly in touch with the British professional staff, and thus withdrawn from the unwholesome influences which too often surround Chinese students in a Chinese city.

The German educational establishment which is to be created at Kiao-chau is in name only a high school, but in reality its scope is much larger than that of the projected British university at Hong-kong. Besides medical and technical branches, it will comprise an agricultural branch (including forestry), and a political science branch, comprehending international law, state and administrative law, mining and maritime law, political economy, and finance. The technical branch, to which special importance is evidently attached, will cover not only mining, electrical and railway engineering, but also architecture and shipbuilding.

Nor is this all. In connection with the high school there is to be a preparatory school of six classes on the lines of a German realschule (without Latin), for which pupils will be received from Chinese government schools, as well as from other German schools already existing in China. The German Government assumes the whole cost, except for a contribution of \$10,000 from the Peking government, which has agreed, moreover, to accept the certificate issued by the Kiao-chau High School as a qualification for admission to the Chinese government service. The capital cost of the Kiao-chau establishment is estimated at \$160,000, and the annual outlay at \$50,000.

A Tokyo correspondent of the London Times, from whom we obtain these facts, points out that another important feature of the Kiao-chau plan is the creation of a translating department, in which German linguists, assisted by Chinese scholars, will undertake the translation of German text-books and other works into the vernacular, presumably the Mandarin or literary dialect. The activity of this department is not to be confined to school instruction alone, but to be extended to the whole field of literature. (Extracts from the Boston Transcript, Aug. 30, 1909.)

CHRISTIAN EDUCATION IN CHINA.

At the Sixteenth Annual Conference of the Foreign Mission Boards of the United States and Canada, held in New York in January, 1909, a committee on education in China was appointed. The resolution creating the committee, as passed by the conference, was as follows:

Resolved further, That the proposal for the appointment of a committee on the present educational needs and opportunities in China be approved, and that this committee consist of the committee on reference and counsel with the addition of twelve laymen, not more than half of whom shall be members of mission

boards, these laymen to be chosen by the committee on reference and counsel, and this new committee to appoint its own officers.

Resolved further, That the function of this committee shall be to promote a larger interest in Christian education in China, but it shall not itself receive or administer funds therefor without further action of this conference.

This will be the active committee, for at least a year, in this country, for the union Christian educational effort for China.

Mr. W. Henry Grant, 156 Fifth avenue, New York, is secretary.

XVII. HEALTH AND HYGIENE.

DEPARTMENT OF SCHOOL HYGIENE, ST. LOUIS PUBLIC SCHOOLS.

[The following information is taken from a paper on the above subject furnished this office by Supt. Ben Blewett, of the St. Louis schools.]

The St. Louis board of education in February, 1909, gave its approval to a report by the superintendent of instruction, in which was presented a plan for establishing a department the function of which should be to discover, and cause to be remedied, as far as possible, physical defects and communicable diseases that might interfere with efficient school work. In giving effect to this plan the following sections were added to rule 8:

SEC. XVI. There shall be a division of the department of instruction, designated as the "department of school hygiene."

SEC. XVII. The work of this department shall be—

(a) To examine all of the pupils at least once a year for the purpose of ascertaining the existence of any physical defect that interferes with the pupil's progress in the school, and to report any such defect to the parents, and advise that the family physician be consulted.

(b) To examine daily all evidences of the presence in the schools of communicable disease and to make prompt report of all cases of such to the board of health or its officers.

(c) To examine the sanitary conditions of the school premises and to make report of it to the superintendent of instruction.

SEC. XVIII. The superintendent of instruction shall have power to appoint for this work a supervisor of hygiene and as many inspectors of hygiene as the board may from time to time determine.

The supervisor and inspectors shall be graduates of medical colleges of recognized standing.

SEC. XIX. The supervisor of hygiene shall be a skilled physician and shall have general supervision of the work of the department and such other duties connected with it as may be assigned to him by the superintendent of instruction.

He shall devote his entire time to the work of the department.

SEC. XX. The inspectors of hygiene shall devote themselves to this work for ten months in each year, and shall during all school hours be engaged in their investigations in the school buildings; and during the school term shall use

such further time as shall be required for making the necessary examinations and reports.

No one shall be nominated for or appointed to the position of inspector of hygiene who has not passed successfully an examination offered by the board of education to all candidates for such positions. This examination shall be given both as a test of professional training and experience as a physician, and of personal qualifications for this special work.

SEC. XXI. The supervisor and inspectors shall be elected for a term of one year by the board of education upon nomination of the superintendent of instruction. The schedule of salaries shall be so fixed as to include the necessary expenses for car fare or livery, for which no extra allowance shall be made.

SEC. XXII. The supervisor and inspectors shall not treat any case of physical defect or disease that has been discovered by either of them while engaged in the work of this department.

SEC. XXIII. The provisions of the rules of the board of education and of the charter, relating to the suspension and removal of teachers, shall apply to the supervisor and inspectors in this department.

SEC. XXIV. The work of the department shall be conducted under such further regulations as may be prescribed by the superintendent of instruction, with the approval of the board of education.

Five districts were to be provisionally established, and each assigned to one inspector of hygiene. The following scale of salaries was proposed: Supervisor, first year, \$2,500; second year, \$2,600; this salary to be paid in twelve monthly installments. Inspectors, first year, \$1,200; second year, \$1,300; third year, \$1,400; fourth year, \$1,500; these salaries to be paid in ten monthly installments.

It was also recommended that a bacteriological laboratory be opened in the board of education building, or in some school building, and that it be equipped with necessary instruments and supplies.

The opinion of the attorney was required on the suggested change of rules. The following portions of his opinion answer the question of the right of the board to undertake the proposed work:

Our state constitution declares that a "general diffusion of knowledge and intelligence is essential to the preservation of the rights and liberties of the people," and therefore provides for the establishment and maintenance of free, public schools. Pursuant to this constitutional provision, the general assembly in 1833 provided for the establishment of such schools in St. Louis, and in that act it was provided that the board of education "shall have power to make all rules, ordinances, and statutes proper for the government and management of such schools and property, so that the same shall not be inconsistent with the laws of the land," and generally to do all lawful acts which may be proper or convenient to carry into effect the business of the corporation.

It is a fundamental principle in statutory and constitutional construction that a comprehensive grant of power, particularly for the accomplishment of great public ends, necessarily carries with it the right to select any appropriate means which are not prohibited by law.

It therefore follows that the board of education may determine, in the exercise of a wise discretion, whether the establishment of a department of school hygiene, with a supervisor and a number of inspectors in charge, is a necessary or proper means for maintaining the efficiency of the schools, whether such

means are reasonably required for "the general diffusion of knowledge and intelligence" which our constitution declares to be "essential to the preservation of the rights and liberties of the people."

The superintendent of instruction reported to the board in April, 1909, as follows:

In accordance with the provisions of rule 8, Section XX, and the action of the board at the February meeting, an examination of candidates for the position of inspector of hygiene was held on April 28.

The examination was conducted by the superintendent of instruction, assisted by the medical adviser and the assistant superintendents.

The examination consisted of a written test of professional scholarship and experience and an oral test of special fitness for the work.

The written test was covered by sets of questions on seven general topics.

During the written examination the candidates' papers were identified by the numbers and not by the names of the writers. In estimating the results of the examination, 50 per cent was allowed to the written test and 50 per cent to the oral test. The value of testimonials entered into the oral test. Fifty physicians having the qualifications required by the board presented themselves for the examination. Of this number, 46 were white men, 2 white women, and 2 colored men. Complete reports on the examination, including sets of questions given in the written examination, are placed in the files in the superintendent's office.

Eligible list.—Upon a careful review of the per cent returns of the examination, without knowledge of the names of the candidates, it was thought best to report to the board the names of all who made 75 per cent or more, and in the order of their standing in the examination.

The work of the new department will begin with the opening of the new school year (1909-10). Each inspector will have under his care between three and four thousand pupils, including the pupils of one of the special schools for individual instruction.

The details of administration of the department are being worked out. These details will include forms of reports and records for the guidance of the department and for the information of teachers, physicians, and the general public.

THE BROOKLINE DAY CAMP AND SCHOOL FOR TUBERCULAR CHILDREN.

This camp and school combined, located in Brookline, Mass., a residence town adjoining the city of Boston, was opened July 7, 1908, and closed September 26 following. The officers of the Brookline Friendly Society, the Brookline Anti-Tuberculosis Society, and the health department united in an effort to arrest the development of tuberculosis found in its early stages in 23 boys and girls taken from the poorer districts of the town. The camp was located on the grounds of the board of health hospital, and was arranged, with reference to shelter and accommodations, very much as day camps for adult tuberculosis patients are arranged in other parts of the country.

Visits were made to the camp daily, except on Sundays. A picnic barge collected the children early in the morning and carried them out for the day. A cook and an experienced nurse, who served both as nurse and teacher, were employed to accompany the patients.

The primary object of the endeavor was to promote outdoor rest, recreation, and good feeling, but nature study was encouraged and books from the public library were supplied.

Of the success of the work Supt. Arthur A. Wordell, of the Brookline Friendly Society, writes:

Seven of the children appear to have the progress of their disease entirely arrested, and with one exception all gained in weight and general condition.

OPEN-AIR SCHOOL FOR TUBERCULAR CHILDREN AT PITTSBURG.

The Tuberculosis League of Pittsburg, Pa., is maintaining an open-air school for the children in the hospital for tuberculosis who are well enough to go to school from one to five hours per day. There are 10 children in the school, which is conducted on one of the open verandas of the hospital. A new building has been promised by the Hebrew Benevolent Society which will accommodate 30 children. The teacher for the school is paid by the Civic Club and by private endeavors.

COURSE IN SANITARY SCIENCE AT COLUMBIA.

President Butler, of Columbia University, has appointed a committee of 12 members to consider the establishment of a school of sanitary science and public health. While plans for the school are in course of development the committee deemed it advisable to inaugurate the movement by an introductory course of lectures on the topics that would be included in the school. The course was inaugurated during the second term of the academic year 1908-9. (Columbia University Quarterly, March, 1909, p. 213.)

COURSE IN GENERAL HYGIENE AT THE UNIVERSITY OF WISCONSIN.

The prevention of disease among students in the university is the prime aim of the new course of study on general hygiene which has just been announced for the second semester, beginning February 23. The relation of the mind to health, the care of the nervous system, infectious diseases and antitoxins, the effects of drugs, alcohol, and tobacco, food supplies and their adulteration, exercise and health, water and milk supply, and a series of similar subjects are to be discussed for the benefit of the students in weekly lectures by members of the faculty from the college of medicine, department of bacteriology, physical training department, and chemistry department.

Prof. William Thompson Sedgwick, of the Massachusetts Institute of Technology, will give two lectures in this course on air supply and ventilation and on water supply and water purification. (University Bulletin, February, 1909.)

UNDERFERD CHILDREN IN CHICAGO.

The problem of underferd school children, which has engaged educational thought in large European cities for a quarter of a century or more, has recently forced itself upon the attention of school authorities in some of our American centers of population, notably New York and Chicago. In the latter city a special committee was appointed to investigate conditions among indigent school children and to report the results of their investigations to the school board. Pursuant to such appointment, reports and opinions were submitted in October, 1908. The superintendent of compulsory education, at the time of making his statement, estimated the number of underferd children in the city at 15,000.

In the opinion of the attorney of the board of education, money appropriated for school purposes can not be expended for food, however necessitous the case. Accordingly it was decided to cooperate with charitable organizations by using the truant-officer force and other agencies of the school system to find out and report needy cases. Basement rooms in school buildings and other suitable places have been fitted up in some of the poorer districts, and charity workers have furnished free breakfasts and lunches to many hungry children. In this way a double purpose has been served—the needy child's hunger has been appeased and increased efficiency in its school work has been secured.

XVIII. PLAYGROUNDS.

Chicago.—The Playground Association of Chicago will hold the third annual Chicago play festival on Chicago Day, Saturday, October 9, 1909. There will be three sessions—10 a. m., 2 p. m., and 7 p. m. At the morning session kindergarten and younger school children will take part; at the afternoon session older children and younger people will present games and playground activities. At the evening session, as principal events in a varied programme, young people and adults will contribute gymnastic, national, and folk dances and games.

The participants will come from playgrounds, schools, social settlements, turner societies, and other organizations interested in play

and recreation. Many of the national dances will be given by immigrant groups in costume.

The 1908 festival had about 2,000 participants and an attendance for the day of 30,000, including many visitors from other cities. The occasion, to which everyone is freely welcome, is rapidly becoming a great yearly civic event in the life of Chicago.

Indiana.—An act of the legislature of Indiana, dated March 5, 1909, authorizes the board of school trustees or commissioners in cities of the first, second, third, and fourth class to establish, equip, and maintain public playground or playgrounds, to be used by the public during the summer-vacation period. Use may be made of school grounds and buildings, and the boards are authorized to purchase or lease additional grounds for the purpose out of the school revenues. The compensation of directors of playgrounds and their assistants shall be paid out of the school revenues. In cities having a board of park commissioners the duties respecting playgrounds shall devolve upon a playground commission consisting of five members, two of whom shall be members of the board of school commissioners or selected by such board, two shall be members of the board of park commissioners or designated by such board, and one shall be appointed by the mayor. The board of park commissioners is authorized to contribute toward the expense of establishing, maintaining, and equipping playgrounds.

For an account of the Third Annual Congress of the Playground Association of America see page 79.

XIX. COMPULSORY EDUCATION AND CHILD LABOR LAWS.

Statutory provisions relating to compulsory attendance and child labor.

COMPULSORY EDUCATION.				CHILD LABOR.	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Alabama.....				12 years, in any mill, factory, or manufacturing establishment.	No child, 12 to 16, may work in any mill, etc., unless attends school 8 weeks each year employed. No child under 14 may be employed during school hours.
Arizona.....	a 8-14	6 months; 20 weeks consecutive.	\$5 to \$25.	12 years, in all cases in manufacturing establishments, except canning industries in vacation; 14, unless to support a parent or self, as specified by law; 14, in mines; females not at all in mines.	No child, 14 to 18, unable to write, may be employed in a manufacturing establishment unless he has attended school 12 weeks the preceding year.
Arkansas.....	8-16	Not less than $\frac{1}{4}$ the full term. Certain counties are exempt.	\$10 to \$25.	14 years, in any mercantile or manufacturing establishment, workshop, hotel, or as messenger, etc. Children 12 to 14, upon permit, may work if parents incapacitated or during vacation.	No minor under 16 may work for gain in school hours, unless he can read and write English or attends night school.
California.....	8-14	Full term.	First, not over \$10 or 5 days' imprisonment; subsequent, \$10 to \$50, or 5 to 25 days, or both.	14 years, in any underground works, mine, smelter, mill, or factory. No female may be employed in a coal mine.	Unlawful to employ children under 14 during school hours unless they have complied with the school-attendance law; under 16, unable to read and write, unless attending day or night school.
Colorado.....	b 8-16	.....do.....	\$5 to \$25.	14 years, in any mechanical, mercantile, or manufacturing establishment.	Children under 14 may not be employed while school is in session. Children 14 to 16 can not leave school to be employed, unless their education is satisfactory to the local or state school board.
Connecticut.....	c 7-16	.....do.....	Not exceeding \$5 each week of absence.	14 years, in any factory, workshop, or manufacturing establishment, except in canning industry, etc., or to support widowed mother.	No child 14 to 16 may be so employed, unless he has attended day or night school 12 weeks the preceding year.
Delaware.....	7-14	5 months (may be reduced by districts to 3).	First, not over \$2; after, not over \$5. On default, imprisonment 2 to 5 days.	14 years, in any factory, workshop, store, office, hotel, theater, as messenger, etc. Children 12 to 14 may get permit to work in certain cases.	Children under 14 may not do any work for wages during school hours; nor under 16 in preceding employments, unless can read and write, and attended school 130 days preceding year.
District of Columbia.	8-14	Full term.	Not exceeding \$20.		

Florida.....	.....	.....	.....	Children under 15 may not be employed more than 49 days without consent of legal guardian.	After Jan. 1, 1908, no child under 14 may be employed as in preceding column (with the exception there noted) unless able to write and has attended school 12 weeks the preceding year; under 18, unless so attended school.
Georgia.....	.....	.....	.....	10 years, in or about any manufacturing establishment, 12 years after Jan. 1, 1907, except for support of self or parents in specified cases.	No child under 14 may be employed in any way during school hours.
Idaho.....	d 8-18	Full term	Not over \$300 or imprisonment not over 6 months, or both.	14 years, in any mine, factory, workshop, mercantile establishment, laundry, hotel, etc., except over 12 during vacations.	No child under 14 may be employed in any way during school hours.
Illinois.....	e 7-16	Full term, to be not less than 6 months.	\$5 to \$20 and costs, and stand committed until paid.	14 years, in any mercantile institution, factory, office, theater, elevator, etc., or as messenger or driver; 16, in or about any mine. No female may work in or about a mine.	No child under 14 may be employed in any way during school hours.
Indiana.....	f 7-14	Full term	\$5 to \$25, and, in discretion of court, imprisonment 2 to 90 days.	14 years, in any manufacturing or mercantile establishment, mine, quarry, laundry, renovating works, bakery, or printing office. No female may work in a mine.	No child under 14 may be employed in any way during school hours.
Iowa.....	f 7-14	16 consecutive weeks; first and second class city boards may require full term.	\$3 to \$20	14 years, in any mine, factory, mill, shop, laundry, packing house, elevator, or store where more than 8 persons are employed.	No child 14 to 16 unable to read and write may be employed unless attending an evening school, if there is one. No child under 14 may be employed at any work for wages during the school term.
Kansas.....	f 8-15	Full term g	\$5 to \$25	14 years, in any factory, workshop, theater, packing house, or in or about any mine; 16, in any dangerous, etc., employment.	Children under 16 unable to read and write English may not be employed in foregoing employments except in vacation of public schools.
Kentucky.....	7-14	8 consecutive weeks; full term in cities of first, second, third, and fourth classes.	First, \$5 to \$20; subsequent, \$10 to \$50.	14 years, in any mine, workshop, factory, store, office, hotel, as messenger, etc.	Under 14 may not be employed in any way during school hours. No minor under 16 may work in a coal mine unless he can read and write and has attended school 3 months in the year.
Louisiana.....	.....	.....	.....	14 years, in any manufacturing or mercantile establishment, mine, laundry, carrying messages, etc.	Under 14 may not be employed in any way during school term; not from 14 to 16 in stated occupations unless can read and write, and attended school 100 days preceding year.
Maine.....	7-15	Full term	Not exceeding \$25, or imprisonment not exceeding 30 days.	14 years, in any manufacturing or mechanical establishment.	Children under 14 may not be employed in foregoing employments, nor in clothing, dressmaking, or millinery establishments, unless they have attended school 4 months in preceding year.

a To 16, if unable to read and write English.

b Children 14 to 16 whose labor is necessary to their own or parents' support are excused.

c Not applicable to children over 14 lawfully employed to labor at home or elsewhere.

d Except children over 14 who have completed eighth grade, or have to support themselves or parents, or have other good cause to be exempt.

e Children 14 to 16 necessarily and lawfully employed are exempt.

f Inclusive.

g 8 weeks for children over 14 who can read and write English and are at work to support themselves or others.

Children under 15 shall not be employed in any manufacturing or mechanical establishment, except during vacation, unless they have attended school 16 weeks during preceding year.

Statutory provisions relating to compulsory attendance and child labor—Continued.

COMPULSORY EDUCATION.				CHILD LABOR.	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Maryland ^a	b 8-12	Full term.....	Not exceeding \$5.....	14 years, in mills and factories (except canning establishments), unless self, widowed mother, or invalid father solely dependent upon such employment. 19 counties exempt from law.	No minor 12 to 16, unable to read and write English, may be employed where there is an evening school unless attending that or another school.
Massachusetts.....	c -	do.....	Not exceeding \$20.....	14 years, in factories, workshops, or mercantile establishments.	Children under 14 may not be employed at any work for wages during school hours; from 14 to 16 may not be so employed in any factory, workshop, or mercantile establishment if unable to read and write. ^d
Michigan.....	7-16	do.....	Fine of \$5 to \$50, or imprisonment 2 to 90 days, or both.	14 years, in any manufacturing or mercantile establishment, workshop, laundry, store, office, hotel, messenger service, etc.	Children 14 to 16 may not be employed unless they have attended school 100 days preceding year, and can read and write and know the elements of arithmetic.
Minnesota.....	e 8-16	do.....	Not over \$50, or imprisonment not over 30 days.	14 years, in factories, mills, workshops, or mines.	Children under 14 years may not be employed in any service during school term; under school age (16 years) in any occupation during school term unless they have attended school the prescribed period; under 16, unable to read and write English, in any indoor occupation (except in vacation) unless attending day or evening school.
Mississippi.....				12 years, in any mill, factory, or manufacturing establishment.	No child 8 to 14 may be employed in any way in school hours unless he has complied with the attendance law. No boy under 16 may work in a mine unless he can read and write.
Missouri.....	f 8-14	Not less than $\frac{1}{2}$ of term. Full term in cities of over 500,000.	\$10 to \$25, or imprisonment 2 to 10 days, or both.	14 years, in any mine, manufacturing or mercantile establishment, laundry, etc., in cities of over 10,000; no females in mines.	Children under 14 not to be employed during school sessions unless they have completed the studies required by law; from 14 to 16, if unable to read and write English.
Montana.....	g 8-14	Full term; in no case less than 16 weeks.	\$5 to \$20.....	16 years, in mines or underground works.	No child under 14 may be employed in any service during school hours.
Nebraska.....	h 7-15	Two-thirds of school term; in no case less than 12 weeks. Full term in cities.	\$5 to \$25 (on truant officer).....	14 years, in any manufacturing or mercantile establishment, office, hotel, etc.	

Nevada.....	8-14	16 weeks; 8 consecutive.....	First \$50 to \$100; subsequent, \$100 to \$200; with costs. First, \$10; subsequent, \$20.....	12 years, in any manufacturing establishment.	No child under 14 may be employed during school sessions, nor under 16 if unable to read and write English. No minor unable to read and write English may be employed unless attending day or evening school, if any is held.
New Hampshire....	18-14	Full term.....	"Punishable as a disorderly person."	14 years, in factories, workshops, mills, or manufacturing establishments; also mines.	Children under 15 must have attended school 12 weeks the preceding year as a condition of employment.
New Jersey.....	17-17	do.....	\$5 to \$25, or imprisonment not exceeding 10 days.	14 years, in factories, workshops, mills, or manufacturing establishments; also mines.	Unlawful to employ in any business or service child under 14 during school term; or one 14 to 16 in city of first or second-class, unless he has an employment certificate (having certificate and not having completed elementary course, must attend evening or trade school); or one 14 to 16 elsewhere, in any factory, etc., unless has employment certificate, or in any service unless has certificate of school attendance, etc.
New Mexico.....	7-14	do.....	First, not over \$5 or imprisonment 5 days; subsequent, not over \$50 or imprisonment 30 days, or both.	14 years, in factories; if 14 to 16, the child must have attended school 130 days the preceding year, and be able to read and write English, and otherwise. Similar provisions apply, in work of over 3,000 population, to places in mercantile establishments, business offices, restaurants, hotels, express or messenger service, except for children over 12 in small places during vacation. For work in or about mines 16 years is the minimum. No female may work in a mine.	Apprentices 12 to 13 years must have attended school 4 months in preceding year.
New York.....	7-16	Full term (not less than 160 days) in districts of over 5,000 population having a superintendent, for children 7-16; 2 elsewhere, for children 8-16, Oct. 1 to June 1.*	\$5 to \$25, or imprisonment not exceeding 10 days.	14 years, in mines, factories, workshops, mercantile establishments, etc.	Children under 14 may not be employed in any manner during school term, or those 14 to 16 unless they have attended school 120 days preceding year and know the elementary branches.
North Carolina.....	8-14	16 weeks.....	\$5 to \$25.	12 years, in any factory or manufacturing establishment (does not apply to oyster canning and packing); 12 years, in mines employing over 10 men (boys); children 12 to 13 may be employed in factories only as apprentices.	Children under 14 may not be employed in any manner during school term, or those 14 to 16 unless they have attended school 120 days preceding year and know the elementary branches.
North Dakota.....	8-14	Full term.....	\$5 to \$20 (on school official).....	14 years, in mines, factories, workshops, mercantile establishments, etc.	Children under 14 may not be employed in any manner during school term, or those 14 to 16 unless they have attended school 120 days preceding year and know the elementary branches.

a The provisions tabulated for Maryland (except in fifth column) are those of the act of 1902, whose operation is limited to Baltimore City and Allegany County.

b To 16 unless regularly employed to labor at home or elsewhere.

c To 16 if wandering about public places without lawful occupation, or if unable to read and write.

d Must be able to so read and write as is required to enter the second grade in 1906; third in 1907, and fourth in 1908 and after.

e 8-18 in cities of the first class. Children who have completed studies of eighth grade exempt.

f To 16 years for children not lawfully, regularly, and usefully employed.

g To 16 years in cities.

h To 16 if unable to read and write English.

i Inclusive. Does not apply to children over 15 who have finished grammar-school course and are regularly employed; otherwise must attend grammar, or high, or manual training school. Children over 14 may be employed in cases of necessity.

k Does not apply to children 14 to 16 lawfully employed.

l Law does not take effect in any county until voted by the county; does not apply to children over 12 lawfully employed at home or elsewhere.

o To 16 if unemployed.

Statutory provisions relating to compulsory attendance and child labor—Continued.

State.	Age.	COMPULSORY EDUCATION.		CHILD LABOR.	
		Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Ohio.....	a 8-14	Full term; in no case less than 24 weeks.	\$5 to \$20; on default, imprisonment from 10 to 30 days.	14 years, in any factory, workshop, business office, mercantile establishment, hotel, as messenger, etc.	No child between 14 and 16 may be employed in foregoing occupations without a schooling certificate.
Oklahoma.....	8-16	3 to 6 months b.	\$10 to \$50.....	14 years, in mines (no girls in mines).	Foregoing employments forbidden to any child 14 to 16 unless attended school 160 days preceding year and can read English. No child under 14 may be employed in any work for compensation during school hours.
Oregon.....	c 9-14	Full term.	\$5 to \$25 fine, or imprisonment 2 to 10 days, or both.	14 years, in any factory, store, workshop, in or about any mine, or in the telegraph, telephone, or public messenger service.	No child 14 to 16 may be employed unless he can read and write English and has complied with the school laws.
Pennsylvania.....	e 8-16	Full term; but the school board of each district has power to reduce this to not less than 70 per cent of the term.	First, not exceeding \$2; subsequent, not exceeding \$5; on default, imprisonment; first, not over 2 days; subsequent, not over 5.	14 years, in any employment, except domestic or farm labor. Girls may not work in or about coal mines.	Children under 13 may not be employed except during school vacations.
Rhode Island.....	f 7-15	Full term.	Not exceeding \$20.....	13 years before, 14 after December 31, 1906, in any factory, manufacturing or business establishment.	Children may work in textile establishments in June, July, and August if they have attended school 4 months during the year and can read and write.
South Carolina.....				10 years after May 1, 1903; 11 after May 1, 1904; 12 after May 1, 1905, in any factory, mine, or textile establishment, except that certain self-dependent children may work in the latter.	No child 8 to 14 to be employed during school hours unless he has attended school 12 weeks during the year.
South Dakota.....	d 8-14	Full term; but districts may reduce it to 16 weeks, 12 consecutive, 4 months or 80 days consecutively.	\$10 to \$20 and costs; stand committed till paid.	14 years, in mines.....	Unlawful to employ children 12 to 14 who can not read and write English, in mills, factories, etc., certain self-dependent children excepted.
Tennessee.....	8-14		First offense, \$1 for each day of absence.	14 years, in workshops, factories, or mines.	No child under 16 who has not completed the 9-year school course may be employed in any railroad, factory, mine, or quarry work, or in delivering messages, except out of school hours.
Texas.....				12 years, in mills, factories, manufacturing or other establishments using machinery; 16 years in mines, distilleries, or breweries.	
Utah.....	8-16	20 weeks, 10 consecutive; in cities of the 1st and 2d class 30 weeks, 10 consecutive.	First, not exceeding \$10; subsequent, not exceeding \$30, with costs.	14 years, in mines (constitution of State).	
Vermont.....	h 8-15	Full term.....	\$5 to \$25.....	12 years, for any railroad company or in any mill, factory, quarry, or workshop, or carrying messages.	

Virginia ^e	8-12	12 weeks.....	First, \$2 to \$10; subsequent, \$5 to \$20.	13 years, after March 1, 1909; 14 after March 1, 1910, in any factory, workshop, mercantile establishment, or mine, except in certain cases of need over 12.	Children under 15 may not be employed during school hours unless excused by the school superintendent.
Washington.....	8-16	Full term.....	Not over \$25.	14 years (boys), 16 years (girls), at any labor not connected with house or farm work; 16 years in mines (girls not at all).	No child under 14 shall be so employed during school term if it hinders regular attendance.
West Virginia.....	8-14	20 weeks.....	First, \$2; subsequent, \$5.	12 years, in factories, workshops, mercantile or manufacturing establishments; 14 in mines (no girls may work in mines).	Children 12 to 14 may not be employed in any occupation, except during school vacations by specified written permit, in stores, offices, hotels, mercantile establishments, laundries, or public messenger service, where they reside (does not apply to farming or other outdoor work).
Wisconsin.....	^f 7-14	Full term in 1st class cities; in 2d class cities not less than 8, elsewhere not less than 6 school months.	\$5 to \$50 and costs, or imprisonment not over 3 months, or both.	12 years, in any occupation; 14, in factories, workshops, mines; 14 to 16, in any occupation without specified written permit.	
Wyoming.....	^d 7-14	Full term.....	Not exceeding \$25.	14 years, in mines; females may not work in mines. (Constitution). 12 years, in the underground workings of any mine.	
United States laws (for Territories).					

^a To 16 if unable to read and write English.

^b In the discretion of school boards.

^c To 16 if unemployed.

^d Inclusive.

^e Not applicable to children over 13 who can read and write English and are regularly employed in useful service.

^f Not applicable to children over 13 who are lawfully employed.

^g The compulsory attendance act applies to 18 counties, in addition to which 13 counties are under special laws.

^h Children over 15 or under 8, when once enrolled, must attend the full term they are enrolled for.

ⁱ Compulsory attendance law optional with the voters of any county, city, or town.

XX. EDUCATION OF THE COLORED RACE.

NEGRO RURAL SCHOOL FUND—ANNA T. JEANES FOUNDATION.

[Compiled from statements made to the board by James H. Dillard, president and general agent.]

FROM STATEMENT IV, APRIL 10, 1909.

We have paid for salaries to date, \$9,862; for building and equipment, \$1,905; for extension of term, \$407.50. The disparity in salaries is striking. As a rule the higher salaries are at the instigation of the county superintendents, and at times the amount per month has apparently been regulated by the lateness of beginning the work. In two places the salary has been divided by special arrangement. In the contributions made for building and equipment, and for extension of terms, I have asked to be assured that at least an equal amount had been raised. Certain offers for these purposes are still outstanding.

In selecting the schools in which we were to pay the salary of an industrial teacher, I have had in mind mainly the consideration whether the point seemed one in which the work would be encouraged and supported, and where its influence would be likely to spread. It can hardly be expected that some mistake has not been made, but from all the information I can obtain, I believe that our teachers have the right spirit and are trying to do good work in school and neighborhood. I have studiously avoided the danger of having our teacher used to supplant the work of other teachers, and have found but one instance in which this was being done, namely, at Rutherfordton, N. C. I found that the industrial teacher to whom, at the request of the county superintendent, we are paying \$40 a month was devoting only six hours a week to industrial work, being used, contrary to our understanding, to save the expense of an assistant teacher. Our teachers offer an excellent clientele for the distribution of leaflets and pamphlets dealing with any feature of rural improvement. I have sent out a pamphlet on school gardens, and am preparing to mail others on this and other subjects.

Two of our teachers in the eastern part of North Carolina have begun to do good work in the way of organization. Both of these are men, and one of them, a graduate of the North Carolina Agricultural and Mechanical College at Greensboro, will work for us in this direction a month or perhaps two months after the close of the school. I hope gradually to find more men like this one. I think very highly of the Henrico plan and hope that its suggestion will be adopted and tried in other places, and I have some reason to believe

that it will be. Already five superintendents have expressed a desire to try the plan next session. In my opinion the money expended has nowhere counted for so much as here. Good results are shown not only in the extension of the industrial work, but in the additional important fact that such a teacher serves incidentally as a supervisor, and supervision is one of the greatest needs of the rural schools. If we could have a hundred counties in the South supplied with supervising teachers of this kind the influence would be tremendous.

In February, March, and April I visited 2 counties in Virginia, 4 in North Carolina, 1 in South Carolina, and 3 in Alabama. I everywhere met with a cordial reception from both white and colored people in the community where I stopped. With rare exceptions I found wretched conditions in the way of schoolhouses and school equipment.

As has been previously stated to the board, and especially to the members of the executive committee, all of our efforts the present year seem to be somewhat in the way of experiment and will supply data for information and discussion in the meeting of the executive committee soon to be held. The larger work and influence of the fund must, I think, be based upon actual accomplishment in the line of some constructive policy. My efforts during this first year have been largely directed toward getting some portion of the fund into use. In doing this I have had constantly in mind the policy which seemed announced in the very composition of this board, namely, union of effort. I believe this influence is already beginning to be felt. I am sure that whatever brings together the efforts of North and South is good. I was glad to hear a few days ago that a southern association is likely to assist a negro institution which has hitherto been entirely supported from the North. All such movements are good. With patience, tact, and wisdom I see no reason why there may not be a constant increase of harmony and cooperation in all the work that is being done for the education of the colored population of the South.

FROM STATEMENT V, JUNE 5, 1909.

THE HENRICO PLAN.

Members of the board may recall that in my last statement I mentioned a plan of work which we have been carrying on in Henrico County, Va. I beg again to call the attention of the board to this plan, because it seems to me a most excellent one for us to adopt and promote as far as we can.

In brief, the plan was this: We supplied the county superintendent with the salary for a competent teacher, whose duty it should be to introduce industrial work into the 22 colored rural schools of the

county and to supervise the work. This teacher, Miss Virginia E. Randolph, began the work on October 26, 1908, and the schools closed June 1. She has spent her whole time in visiting these schools, sometimes two or three a day, so that the schools have had the benefit not only of the industrial training, but of constant supervision, suggestion, and encouragement. It has also been a part of her work to form, in the various communities, organizations for school and home improvement.

Miss Randolph writes to me that the work of the schools is now on exhibition at the Henrico County Court House, and that the members of the Henrico board are agreeably surprised. I can state from letters received that the work is very heartily approved by the county superintendent.

MODIFICATION OF THE ABOVE PLAN.

There are very many counties in which it would be impossible at present to carry out this plan. Whether from lack of schools, or the wide separation of those that exist, or the shortness of term, or the incompetence of the teachers, the plan would not yet be feasible. I find, however, that it will be possible in many places to adopt a modification of the plan; that is, we can supply the salary for a teacher at the most favorable point in the county, have this teacher give three or four days' work to this school, and let her give the rest of her time to two, three, or four neighboring schools, with the intention of influencing these schools and communities in the same manner as has been done in Henrico County.

I have just returned from a trip through parts of Florida, Georgia, and Alabama, and at a number of places I found that this plan seemed feasible and that it met with very hearty approval. I believe that it can be carried out at most of the schools in which we have been supplying a teacher during the past session. The principals and school authorities whom I have so far heard from have approved the idea and have expressed a willingness to assist in carrying it out next session.

FINANCIAL.

I beg to report that during the present session, up to date, we have paid out in salaries to teachers \$14,011.50; in contribution toward building and equipment, \$1,965; and in contribution for extension of school term, \$470.

FROM STATEMENT V (SUPPLEMENTARY), JUNE 10, 1910.

ADVANTAGE OF THE HENRICO PLAN.

The great majority of the outlying rural schools are hopelessly isolated. They have practically no supervision. The work, so far as I have been able to see, is crude and inefficient. The school build-

ing, if there be one at all, shows neglect without and within. There is oftentimes not even the equipment which could be provided on the spot. I have seen benches supported on brickbats, holes in floors and roofs, doors and windows sagging, and other such signs of neglect which could easily be remedied. Neither within the school building nor on the school grounds is there any effort at tidiness.

There are, of course, exceptions; but the picture is true for the great majority of cases, nor under all the circumstances should we be surprised that it is true. Yet it is these schools, and only these schools, which are within reach of the masses of children throughout the rural districts.

It can readily be seen what a change might be effected in such schools, and in the neighborhood, by the supervision and the influence of a trained teacher, even if there were only two or three visits a month.

FROM STATEMENT VI, JULY 31, 1909.

At a meeting of the executive committee held on July 1 the following expenditures during the first year of the use of the fund were reported: For salary of teachers, \$15,059; for building and equipment, \$1,965; for extension of term, \$547.50. Subject to the approval of the board at its next meeting, the committee agreed upon a tentative appropriation of \$28,000 for carrying on the work.

Several important matters were discussed, such as the appointment of an assistant to the president to aid in influencing legislation and public sentiment, the use of county organizers, and the gathering of reliable statistics.

About three weeks ago an application came from State Supt. T. H. Harris, requesting that we supply to Louisiana a number of teachers to work in accordance with the Henrico plan. This is the first important business communication that has come from a state official. I may add that I know Professor Harris to be thoroughly interested in the improvement of the negro schools, and that he favors a fairer distribution of the school funds. Knowing his sentiments, I can not but think that we should do what we can to cooperate with him.

COMMITTEE OF TWELVE FOR THE ADVANCEMENT OF THE
INTERESTS OF THE NEGRO RACE.

The committee of twelve for the advancement of the interests of the negro race was appointed at a conference of prominent colored men held in the parlor of Carnegie Hall, New York City, January 6, 7, and 8, 1904. At present, Booker T. Washington, president of Tuskegee Institute, Tuskegee, Ala., is chairman, and Hugh M.

Browne, principal of Institute for Colored Youth, Cheyney, Pa., is secretary.

The work of the committee thus far has been largely concerned with the civic rights of the colored man in the South, but a quotation from the proceedings of the appointing conference shows a favorable attitude toward the better education of the race. The conference held that the education of the negro race should consist of—

(1) Thorough training of leaders and teachers in the higher institutions of learning.

(2) Thorough elementary training for every negro child.

(3) Industrial training of the masses in trades and handicrafts.

STATE NORMAL SCHOOL FOR COLORED PERSONS—MARYLAND.

The Maryland state board of education, in accordance with acts of the general assembly, session of 1908, has decided to establish State Normal School No. 3 in Montgomery County, and has purchased for the purpose a farm of 238 acres in that county. This normal school is for educating suitable colored persons, male and female, to become teachers in the colored schools of the State. Prof. George H. C. Williams has been elected principal by the state board. It is expected that the school will be opened in November, 1909. It is announced that, in addition to proper academic training, the mechanical arts and trades and agriculture for the males, and domestic science for the females, in all their branches, will be taught under the supervision of experts.

The state board contemplates awarding one free scholarship to each county and three to Baltimore. Provision will also be made so that others who desire an education can attend the school and by moderate work cover their expenses.

THE BEREA COLLEGE CASE.

In 1904 the legislature of Kentucky enacted a law (Acts 1904, chap. 85, p. 181) making it "unlawful for any person, corporation, or association of persons to maintain or operate any college, school, or institution where persons of the white and negro races are both received as pupils for instruction." The law was contested by the authorities of Berea College, and the case was carried to the Supreme Court of the United States for final decision. The Supreme Court affirmed the decision of the court of appeals of Kentucky, that the right to teach white and negro children in a private school at the same time and place is not a property right, and that a corporation created by the State has no natural right to teach at all, but its right to teach is such as the State sees fit to give it. The State may withhold it altogether or qualify it.

NEGRO FARMERS' IMPROVEMENT SOCIETIES IN TEXAS.

In Texas there are nearly 500 negro farmers' improvement societies. These are made up from 15 to 50 neighbors, who form a society for mutual encouragement in buying land, improving homes, keeping yards and fences in order, cultivating gardens, getting better stock, raising hogs and chickens, helping to improve schools, educating their children, behaving well, and cultivating sociability. The members of these societies have begun to cooperate in business affairs, such as buying farm supplies, and later they aim to do the same in selling crops and produce. Anyone who tries honestly and perseveringly can organize a farmers' improvement society. (James H. Dillard.)

XXI. PROVISION FOR SPECIAL CLASSES OF CHILDREN.**CONFERENCE ON THE CARE OF DEPENDENT CHILDREN.**

On December 22, 1908, a request, signed by nine prominent men interested in the care of needy children, was directed to President Roosevelt, asking that a conference be called under his auspices, to meet in Washington in January, 1909, for the purpose of discussing and devising means of improving child-caring work in the country. In compliance with this request, the President three days later issued a call for a conference.

Invitations to attend the conference were extended to over 200 prominent workers, living in all parts of the United States. Among those invited were prominent pastors of Catholic and Protestant churches, Jewish rabbis, judges of juvenile and other courts, members of state boards of charities, educators, settlement workers, superintendents of orphan asylums and home-finding societies, and other leaders of this particular phase of philanthropic work.

Pursuant to the call, the conference met in Washington on January 25 and 26, 1909. Five sessions were held. President Roosevelt officiated as chairman of the conference, the vice-chairmen being Hon. Homer Folks, secretary of the New York State Charities Aid Association; Hon. Thomas M. Mulry, president of the St. Vincent de Paul Society of the United States; and Judge Julian W. Mack, ex-president of the National Conference of Jewish Charities; and the secretary, Mr. James E. West, secretary of the National Child-Rescue League.

The conference devoted itself to a discussion of the nine propositions contained in the memorandum accompanying President Roose-

velt's letter of invitation and such other relevant questions as had been suggested by members of the conference. The conclusions of the conference, as incorporated in the report of the committee on resolutions, Dr. Hastings H. Hart, chairman, were as follows:

1. *Home care*.—Children of worthy parents or deserving mothers should, as a rule, be kept with their parents at home.

2. *Preventive work*.—Society should endeavor to eradicate causes of dependency like disease and to substitute compensation and insurance for relief.

3. *Home finding*.—Homeless and neglected children, if normal, should be cared for in families when practicable.

4. *Cottage system*.—Institutions should be on the cottage plan with small units, as far as possible.

5. *Incorporation*.—Agencies caring for dependent children should be incorporated, on approval of a suitable state board.

6. *State inspection*.—The state should inspect the work of all agencies which care for dependent children.

7. *Inspection of educational work*.—Educational work of institutions and agencies caring for dependent children should be supervised by state educational authorities.

8. *Facts and records*.—Complete histories of dependent children and their parents should be recorded for guidance of child-caring agencies.

9. *Physical care*.—Every needy child should receive the best medical and surgical attention and be instructed in health and hygiene.

10. *Cooperation*.—Local child-caring agencies should cooperate and establish joint bureaus of information.

11. *Undesirable legislation*.—Prohibitive legislation against transfer of dependent children between States should be repealed.

12. *Permanent organization*.—A permanent organization for work along the lines of these resolutions is desirable.

13. *Federal children's bureau*.—Establishment of a federal children's bureau is desirable, and enactment of pending bill is earnestly recommended.

14. Suggests special message to Congress favoring federal children's bureau and other legislation applying above principles to District of Columbia and other federal territory.

Pursuant to the last-mentioned recommendation, the President of the United States sent a special message to Congress, urging the establishment of a children's bureau. Bills having that end in view were introduced in the Senate and the House of Representatives, but did not become law.

COMPULSORY EDUCATION OF BLIND AND DEAF CHILDREN IN INDIANA.

An act of the legislature of Indiana, approved March 6, 1909, requires the attendance at school, for a term or period of not less than that of the public school corporation where the child or children resides, of any blind or deaf child or children between the ages of 8 and 16 years who are totally blind, deaf, or whose vision or hearing is so defective that they are unable to secure an education by

sight or hearing. Such child or children shall be required to attend the Indiana School for the Blind or the Indiana State School for the Deaf.

UTAH COMMISSION FOR THE ADULT BLIND.

The Utah commission for the adult blind was created by an act of the legislature approved March 22, 1909. It consists of the governor and four other members appointed by him, with the approval of the senate. The duties are to prepare and maintain a register of the adult blind in Utah; to establish, equip, and maintain one or more workshops for the industrial training and employment of the adult blind; to maintain a bureau of information to assist in the finding of employment and in the development of home industries for the adult blind; to furnish material and tools to adult blind persons; and to assist them in marketing their handiwork and products. The sum of \$4,000 is appropriated for the purposes of the act.

VACATION SCHOOLS FOR BACKWARD CHILDREN.

Supt. William H. Maxwell, of the New York City public schools, has introduced in the vacation schools of that city summer classes for backward children. Such classes are organized in all the buildings where vacation schools are maintained, for the benefit of pupils who failed of promotion at the close of the spring term. Teachers are urged to enlist the interest of children who need the instruction contemplated.

Doctor Maxwell points out that the increased influx in recent years of an inferior class of immigrants from southern Europe has been followed by a corresponding increase in mental defectives and delinquents among school children. It is to correct, as far as possible, this condition that schools for backward children are maintained in vacation time.

XXII. SOME EDUCATIONAL EXPERIMENTS.

Private schools offer opportunity for experiments in education, many of which prove to be of permanent and universal value and eventually modify entire systems of education. England is pre-eminently a country of private schools—that is, schools free from official restraints. The national character has been formed in institutions of this class, and their value as centers of new and fruitful influences is abundantly illustrated by the work of Thring at Uppingham and of Arnold at Rugby.

Among private institutions in England embodying features or principles which are still in an experimental stage, the following are typical examples of coeducation boarding schools: Bedales, for boys and girls from 7 to 19 years of age, founded in 1893 by Mr. J. H. Badley, who had been an assistant master at Abbotsholme, and who transferred some features of the latter to the new establishment; Keswick School, founded in 1898 by the Rev. Cecil Grant, with the purpose of educating "boys and girls together as far as possible on public school principles" ("public schools" meaning endowed schools, such as Eton, Rugby, etc.).

Abbotsholme, it may be explained, was founded by Dr. Cecil Reddie in 1889, for the purpose of educating "boys of the directing classes according to the latest scientific principles." The institution occupies a fine estate of 134 acres, extending on both sides of the River Dove, which divides Derbyshire from Staffordshire, and affording every facility for outdoor exercise and for the special forms of education which are conducted in garden and field. The latest prospectus of the school says:

The curriculum is carefully planned to cover seven years. In conjunction with the school life, it provides an all-around education, free, as far as possible, from specialization up to the age of 17 or 18. It develops all sides of the boy's nature harmoniously, brings him into intimate relation with nature and human life, teaches him to think for himself, and develops his power of initiative.

The linguistic studies include a careful training in English, French, and German, taught according to the modern natural system; that is, by speaking as well as writing. Latin follows, and in some cases Greek, but the central aim in the linguistic studies is to give the boy a real scholarly grasp of his mother tongue. * * *

On the side of nature study the elements of all the chief natural sciences are taught in intimate connection with mathematics, and largely in the open air in connection with work on the estate, in the garden, and on the school farm. This side of the boy's life is intimately connected with the training in drawing, painting, modeling, and woodwork, all of which are compulsory. To create an interest in pictures and sculpture is a prominent feature of the school, the various rooms and corridors being used as picture galleries. Through this it is hoped every boy will be trained to appreciate art in all its chief forms. Throughout the school there is systematic teaching of hygiene and economics, the boys in this connection having a very essential share in the government and organization of the place.

The most important aim of the school is, of course, effective moral and religious teaching. The latter is, as far as possible, unsectarian, leaving the peculiar tenets of particular religious bodies to be dealt with in each boy's home. The school has its own liturgy printed at the school press. This contains, in addition to the ordinary daily morning and evening services, special services for the great church festivals. It also provides services for certain days of national rejoicing, such as Trafalgar Day. Other yearly festivals, which add a charm to the school life, are the parents' gathering, the harvest home, foundation day, and the neighbors' Christmas gathering; and one of the chief events of the year is the old boys' gathering, covering five days, at Easter.

Abbotsholme has attracted wide attention, in particular, through the interest excited by the work of M. Edmond Demolins, on the superiority of the Anglo-Saxons,^a in which this school was presented as the nucleus of an ideal society. Several schools have been established on the Continent, in which the principal features of Abbotsholme have been adopted in whole or in part. The best known of these continental experiments is the *École (Nouvelle) des Roches*, near Verneuil, department of Eure, France, founded in 1899 by M. Edmond Demolins himself.

The distinction between England and France, in regard to the possibilities of private initiative in education, is indicated by M. Steeg, in his report to the Chamber of Deputies on the budget for 1909, elsewhere referred to in this report. Discussing the need of changes in the scheme of liberal education in France, M. Steeg says:

It is of little use to invite the aid of private initiative. The example of the Anglo-Saxons is often held up to us. Some establishments modeled after English precedents have been created in France. M. Lavissee has welcomed their appearance on account of their freedom to try experiments before which the university (state teaching system) hesitates through indecision or helplessness. "We bear the weight of ages, which is enormous," says this eminent master; "we are the servants of the State, which loves neither changes in purpose nor divided purposes." Furthermore, these colleges have been instituted by wealthy capitalists for the children of the rich, and, indeed, the very rich, and this enables them to view with such happy indifference the programmes and the sanctions of secondary education.

In fact, private secular secondary education does not in reality exist among us. At Paris some valuable establishments still maintain their existence, as *Sainte-Barbe* and the *École Alsacienne*, which have been, and still are, useful fields of experiment. What, however, would have become of these products of private initiative if they had not secured at critical moments the moral support of the university and material support from the budget of public instruction?

Between the state college and the church college there is no longer any place for private education worthy of the name. If it exists in England, if it is indeed prosperous, this is because "the weight of ages" does not operate there in the same way and in the same sense as with us.

Among important experiments in industrial education may be noted the efforts going on in many countries for the revival or development of local industries. Ireland affords interesting proof of the value of such experiments, particularly the work of the Royal Irish Industries Association, which was founded about twenty-five years ago by the Countess of Aberdeen for the purpose of aiding the Irish peasantry in the establishment of home industry, such as the making of lace, embroidery, and knitting. The work is now done on a large scale throughout Ireland. All articles are sent to the central office of the association, and from there are distributed and sold in all

^a *À quoi tient la supériorité des Anglo-Saxons*, by Ed. Demolins. See, in particular, Chapter III.

parts of the world, the proceeds going to the poor girls who do the work.

Each county in Ireland has its own industries—some rugs and tweeds, others laces and embroidery. Among the peasantry of Kildarney the industry is basket making and furniture. The girls are taught by experts in the various branches of the work; the products are taken by the association and the profits are turned over to the girls.

The Government has recently aided in the endeavor by grants made to local committees for the purpose of enabling them to provide instruction for workers in various forms of cottage industries, such as lace and crochet making, embroidery, and drawn-thread work.

Peculiar interest attaches to an endeavor to alleviate the misfortunes of the Boers resulting from the war with England by introducing the spinning and weaving industry in the Transvaal and Orange River Colony. The spirit that prompted the enterprise is indicated in the following account of its beginnings:

Two young Englishwomen—Miss Hobhouse and Miss Clark, the latter a granddaughter of John Bright—on seeing the misery were stirred to help it, and, like true Englishwomen, devised a thoroughly practical way in which to do it.

Why, they asked, should not these people, who can raise wool, spin and weave it, instead of sending their fleeces to other lands and getting in return, at great cost, the material for garments and bedding? To be sure, there was no wood nor coal; there were no factories; hardly even means of transportation, as we should look upon it. Undaunted, they went to work in England not only to raise money to buy hand looms and spinning wheels, but they entered the factories and learned how to dye, to spin, to "warp up" a hand loom, to weave, and many more processes which could be of avail in South Africa.

Miss Hobhouse was the pioneer as a teacher. Going back to the Boer country, she selected a remote village, Philippolis, in the Orange River Colony, where a good clergyman, who for forty years had shepherded his flock there, was eager to help her. In this obscure spot a little school for teaching fireside industries was opened by Miss Hobhouse on the 13th of March, 1905. It seems incredible that it could be of such recent date when we hear what that small beginning has resulted in.

The school began with 6 girls. In a little more than six months 40 had been trained. The success was so immediate that interest was soon aroused in the Transvaal as well as in the Orange River Colony, and in August another school was started near Johannesburg, with a Swedish teacher, whose experience in her own country, where such beautiful work is done on hand looms, made her an admirable assistant in this new undertaking.^a

According to a report issued in 1907, two years after the experiment was started, 22 teachers were then teaching spinning in as many villages.

^a Spinning and Weaving in Boerland, by Isabel C. Barrows. Silver Cross, April, 1907, pp. 7-10.

CHAPTER II.

EDUCATIONAL LEGISLATION, SIXTIETH CONGRESS, SECOND SESSION.

The laws relating to education, aside from those making appropriations, that were enacted during the second session of the Sixtieth Congress are few in number.

The appropriations in behalf of education, including the continuing appropriations for colleges of agriculture and the mechanic arts and for agricultural experiment stations, may be summarized as follows:

Department of State:

10 student interpreters in China.....	\$11,250.00
6 student interpreters in Japan.....	6,750.00
10 student interpreters in Turkey.....	11,250.00
Quarters for student interpreters in Japan.....	600.00
International Congress of Hygiene and Demography.....	10,000.00

War Department:

United States Military Academy.....	2,534,128.13
Army War College.....	22,700.00
Service schools.....	78,000.00
Officers' schools at military posts.....	12,000.00

Department of Justice:

National Training School for Boys.....	63,300.00
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Navy Department:

United States Naval Academy.....	635,351.22
Naval training stations.....	787,833.50
Naval War College.....	14,700.00

Department of the Interior:

Bureau of Indian Affairs.....	4,157,109.00
Bureau of Education.....	306,700.00
Colleges of agriculture and mechanic arts.....	2,000,000.00
Howard University.....	162,200.00
Columbia Institution for the Deaf and Dumb.....	70,000.00

Department of Agriculture:

Office of Experiment Stations.....	1,623,060.00
Library of Congress.....	1,024,937.00
Smithsonian Institution.....	745,700.00
District of Columbia (one-half of total appropriations).....	1,637,673.45

Total.....	15,915,242.30
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STATE DEPARTMENT.

International Congress.—Authorizes the President of the United States to invite the International Congress of Applied Chemistry to hold its eighth meeting in the United States in the year 1912. (Stat. L., 1170; Mar. 4, 1909.)

Student interpreters.—Appropriates \$11,250 for salary and tuition of 10 student interpreters at the legation to China; \$6,750 for salary and tuition of 6 student interpreters at the embassy to Japan; \$11,250 for salary and tuition of 10 student interpreters at the embassy to Turkey; and \$600 for rent of quarters for the student interpreters in Japan. (35 Stat. L., 674, 675, 679; Mar. 2, 1909.)

International Congress of Hygiene and Demography.—Appropriates \$10,000 to enable the United States to participate in the Congress to be held in Washington, D. C., in 1910. (35 Stat. L., 680; Mar. 2, 1909.)

WAR DEPARTMENT.

The specific appropriations for the educational work of the War Department are as follows:

United States Military Academy-----	\$2, 534, 128. 13
Army War College-----	22, 700. 00
Engineer School, Washington, D. C-----	25, 000. 00
Coast Artillery School-----	28, 000. 00
United States service schools-----	25, 000. 00
Officers' schools at military posts-----	12, 000. 00
Total -----	2, 646, 828. 13

United States Military Academy.—Authorizes the admission and instruction of Mr. Demetrio Castillo, jr., of Cuba. (35 Stat. L., 1039; Mar. 4, 1909.)

DEPARTMENT OF JUSTICE.

National Training School for Boys, Washington, D. C.—Provides that every male juvenile offender who may be committed to this institution, and who has by his conduct given sufficient evidence that he has reformed, may be released on parole. (35 Stat. L., 657; Feb. 26, 1909.)

Appropriates \$15,000 for hospital building and equipment and \$48,300 for maintenance. (35 Stat. L., 1013, 1018; Mar. 4, 1909.)

NAVY DEPARTMENT.

The appropriations for educational purposes under the Navy Department were as follows:

United States Naval Academy:	
Current expenses-----	\$534, 293. 22
Buildings and grounds-----	75, 000. 00
Engineering experiment station-----	26, 058. 00

Naval War College.....	\$14,700. 00
Naval training stations.....	787,833. 50
Total.....	1,437,884. 72

DEPARTMENT OF THE INTERIOR.

BUREAU OF INDIAN AFFAIRS.

The following appropriations were made for the education of Indians:

Support of Indian day and industrial schools.....	\$1,425,000. 00
School buildings, sewerage, water supply, etc.....	300,000. 00
Transportation of Indian pupils.....	75,000. 00
Superintendent of Indian schools, salary.....	3,000. 00
Traveling expenses.....	1,500. 00
Matrons to teach domestic science.....	30,000. 00
Farmers and stockmen to teach Indians.....	125,000. 00
Indian schools:	
Fort Mojave, Ariz.....	38,100. 00
Phoenix, Ariz.....	127,400. 00
Truxton Canyon, Ariz.....	21,200. 00
Sherman Institute, Riverside, Cal.....	104,359. 00
Grand Junction, Colo.....	34,600. 00
Fort Lewis, Colo.....	36,600. 00
Sac and Fox School, Iowa.....	17,560. 00
Haskell Institute, Kans.....	155,750. 00
Kickapoo Indian School.....	16,860. 00
Sacs and Foxes, Kans.....	200. 00
Mount Pleasant, Mich.....	55,800. 00
Morris, Minn.....	27,650. 00
Pipestone, Minn.....	45,675. 00
Chippewas, Minnesota.....	4,000. 00
Genoa, Nebr.....	58,100. 00
Carson City, Nev.....	56,900. 00
Albuquerque, N. Mex.....	56,900. 00
Santa Fe, N. Mex.....	58,500. 00
Cherokee, N. C.....	29,720. 00
Fort Totten, N. Dak.....	60,975. 00
Wahpeton, N. Dak.....	25,200. 00
Bismarck, N. Dak.....	25,200. 00
Chilocco, Okla.....	129,400. 00
Osage Indian School, Oklahoma.....	14,000. 00
Pawnees (2 manual-labor schools).....	10,000. 00
Quapaws.....	1,000. 00
Five Civilized Tribes:	
Schools.....	150,000. 00
Choctaws, annuity for education.....	6,000. 00
Seminoles, annuity for schools.....	2,500. 00
Salem, Oreg.....	112,200. 00
Molels, Oregon.....	3,000. 00
Carlisle, Pa.....	164,000. 00
Chamberlain, S. Dak.....	27,650. 00
Flandreau, S. Dak.....	69,425. 00

Indian schools—Continued.

Pierre, S. Dak.....	\$35, 050. 00
Rapid City, S. Dak.....	68, 350. 00
Sioux day and industrial schools.....	200, 000. 00
Utes.....	1, 800. 00
Hampton, Va.....	20, 040. 00
Hayward, Wis.....	38, 870. 00
Tomah, Wis.....	49, 450. 00
Shoshone, Wyo.....	34, 025. 00
Clerks to superintendent of Indian schools.....	3, 600. 00
Total.....	4, 157, 109. 00

Indian schools.—Grants the Indian schools at Fort Lewis, Colo., and Grand Junction, Colo., to the State of Colorado; the Indian school at Morris, Minn., to the State of Minnesota; the Indian school at Chamberlain, S. Dak., to the State of South Dakota, and the Panguitch school in Utah to the State of Utah. The grants are made on condition that the lands and buildings shall be held and maintained by the several States as institutions of learning and that Indian pupils shall at all times be admitted to such schools free of charge for tuition and on terms of equality with white pupils. (35 Stat. L., 788, 792, 808, 811; Mar. 3, 1909.)

BUREAU OF EDUCATION.

The appropriations for objects under the Bureau of Education were as follows:

Salaries:

Commissioner of Education.....	\$5, 000. 00
Chief clerk.....	2, 000. 00
Editor.....	2, 000. 00
Statistician.....	1, 800. 00
Specialist in charge of land-grant college statistics.....	1, 800. 00
Translator.....	1, 800. 00
Collector and compiler of statistics.....	2, 400. 00
Specialist in foreign educational systems.....	1, 800. 00
Specialist in educational systems.....	1, 800. 00
2 clerks of class 4.....	3, 600. 00
2 clerks of class 3.....	3, 200. 00
4 clerks of class 2.....	5, 600. 00
8 clerks of class 1.....	9, 600. 00
6 clerks, at \$1,000.....	6, 000. 00
6 copyists, at \$900.....	5, 400. 00
2 copyists, at \$800.....	1, 600. 00
1 copyist.....	720. 00
2 skilled laborers, at \$840.....	1, 680. 00
1 messenger.....	840. 00
1 assistant messenger.....	720. 00
3 laborers, at \$480.....	1, 440. 00
1 laborer.....	400. 00
Total for salaries.....	61, 200. 00

Books for library-----	\$500. 00
Collecting statistics-----	4, 000. 00
Distributing documents-----	2, 500. 00
Rent-----	4, 000. 00
Education in Alaska-----	200, 000. 00
Reindeer for Alaska-----	12, 000. 00
Printing and binding annual report-----	22, 500. 00
Total-----	306, 700. 00

GEOLOGICAL SURVEY.

Provides that the Director of the Geological Survey shall hereafter furnish to any person, concern, or institution, in the interest of education and the dissemination of knowledge, that shall pay in advance the whole cost of material and services thereof, copies of any photographs or lantern slides in the possession of the United States Geological Survey. (35 Stat. L., 989; Mar. 4, 1909.)

ALASKA.

Public schools.—Repeals the provision of an act of Congress approved January 27, 1905 (33 Stat. L., 616), requiring 5 per cent of the license money, collected outside of incorporated towns in Alaska to be devoted to the care and maintenance of insane persons, and provides that such 5 per cent, or so much thereof as may be necessary, shall hereafter be applied to and used for the establishment and maintenance of public schools in said district, under the supervision of the governor. (35 Stat. L., 601; Feb. 6, 1909.)

HOWARD UNIVERSITY, WASHINGTON, D. C.

Appropriates for year ending June 30, 1910, \$49,000 for maintenance; \$9,000 for department of manual arts; \$3,000 for libraries; \$90,000 for scientific building and equipment; \$3,000 for repairs to buildings and improvement of grounds; \$5,000 for medical department; \$200 for laboratories; \$3,000 for fuel and light. (35 Stat. L., 991-992; Mar. 4, 1909.)

COLUMBIA INSTITUTION FOR DEAF AND DUMB.

Appropriates for year ending June 30, 1910, \$65,000 for support and \$5,000 for repairs to buildings and pavements. (35 Stat. L., 991; Mar. 4, 1909.)

DEPARTMENT OF AGRICULTURE.

Office of Experiment Stations:

Salaries-----	\$39, 260. 00
Expenses-----	34, 800. 00

Agricultural Experiment Stations.....	\$720, 000. 00
Increase.....	720, 000. 00
Alaska, Hawaii, Porto Rico, and Guam.....	99, 000. 00
Farmers' institutes and agricultural schools.....	10, 000. 00
Total.....	1, 623, 060. 00

LIBRARY OF CONGRESS.

Salaries, books, and care of building.....	\$822, 937. 00
Printing and binding.....	202, 000. 00
Total.....	1, 024, 937. 00

SMITHSONIAN INSTITUTION.

International exchanges.....	\$32, 000. 00
American ethnology.....	43, 000. 00
International catalogue of scientific literature.....	6, 000. 00
Astrophysical observatory.....	13, 000. 00
National Museum.....	531, 000. 00
National Zoological Park (one-half of \$95,000).....	47, 500. 00
Printing and binding.....	72, 700. 00
Total.....	745, 200. 00

DISTRICT OF COLUMBIA.

The appropriations for educational purposes, one-half payable from the revenues of the General Government, included in the act making appropriations for the government of the District of Columbia, were as follows:

Free Public Library.....	\$61, 020. 00
Public schools.....	3, 105, 971. 90
Instruction of deaf and dumb.....	10, 500. 00
Colored deaf mutes.....	6, 000. 00
Instruction of indigent blind children.....	6, 000. 00
Reform School, care and maintenance of boys.....	25, 300. 00
Reform School for Girls.....	24, 375. 00
Industrial Home School for Colored Children.....	13, 110. 00
Industrial Home School.....	23, 070. 00
Total.....	3, 275, 346. 90

CHAPTER III.

STATE EDUCATIONAL ASSOCIATIONS.

By CHARLES S. FOOS,
Superintendent of Public Schools, Reading, Pa.

The temper of the present epoch is iconoclastic. In every department of human activity men and women are caviling at existing conditions. To be sure, some criticism is constructive, but much of it is destructive. Its seeming intent is not to build up, but to tear down; to extirpate, not to foster. Its tone is not optimistic, but pessimistic. The public-school system of America is to-day a victim of this capitious censure. If any pupil of the public schools fails to make good at any point, immediately there is a hysterical rhapsody against the public schools. Even educational organizations have not escaped the relentless causticity of newspaper and periodical writers. Educational associations, they frequently write, are the forum for vagary instead of principle; are a drawback instead of an uplift to pedagogical progress; are autocratic instead of democratic in their influence.

In spite, however, of this tendency, the public educational system will continue to grow and improve, and educational associations will flourish and broaden their functions and influence. This instinct to organize developed with the human race. From the earliest times men have banded together. At first, this disposition to group was for protection; as time went on, it was to improve physical conditions; and still later, for intellectual purposes. This inherent tendency in men to combine brought about the historic movements of the world. Organization of men resulted in the exodus from Egypt; in the formation of the Christian religion; in the abolition of slavery in this country; in the establishment of all that has been worth while. Benjamin Franklin foresaw the value of organization, and he devoted his genius to the organization of his fellow-citizens into groups for specific purposes, the greatest of which was the union of the colonies.

DATE OF ORGANIZATION.

Early in the history of education the need of meetings for exchange of views was evident. From the first days of the schoolmaster men have conferred in the interest of the betterment of educational proc-

esses. These gatherings at first were informal and their results meager, but from crude beginnings have evolved the present helpful educational societies. Soon after the establishment of the public schools state organizations appeared, and this is the theme of my paper. So far as data are available, Rhode Island and Massachusetts have the oldest state educational bodies; both were organized in 1845. New York followed in 1846; Connecticut in 1847; Ohio in 1849; Michigan, Pennsylvania, and Wisconsin in 1853; Illinois, Indiana, Iowa, and New Hampshire in 1854; New Jersey in 1855. Other dates of organization are as follows: Minnesota, 1861; Missouri, 1862; Kansas, 1863; Maryland, 1866; California, Georgia, and Tennessee, 1867; Arkansas, 1869; Kentucky, 1872; Colorado, 1875; Alabama, 1882; South Dakota, 1883; North Carolina, 1884; New Mexico and Mississippi, 1886; North Dakota, 1887; Wyoming and Louisiana, 1892. To-day every State and Territory, except Delaware, has an educational or teachers' association.

PLAN OF ORGANIZATION.

The general plan of the various state educational associations for teachers is somewhat similar, but in detail they differ materially. Some are more elaborate than others. Colorado, Illinois, Iowa, Indiana, Wisconsin, Kansas, Louisiana, and Missouri are among those having extensive plans of organization. Tennessee, apparently, has the simplest plan of operation, holding only a general session. California centralizes authority in an admirable manner in a board of directors. There is no agreement in the scheme of organization. In the 47 associations there are at least 50 different departments. The plan of organizing is based largely on the several divisions of educational work, although most have departments in branches of study as well as in school departments. Maryland has no departments, although there is a high-school teachers' association in the State. Iowa subordinates the sections or round tables to the departments. It has four departments—college and university, county superintendents, normal and secondary, elementary and graded departments. These departments have the authority to organize round tables. The elementary and graded department consists of these sections: superintendents and principals, penmanship and drawing, primary, library and school directors. North Dakota has five departments—college and normal, high school, elementary education, county superintendents, and school directors. Rhode Island has four—high school, grammar school, primary and kindergarten, country and village school. Connecticut, on the other hand, organizes sections by branches of study and has sections in history, literature, physical training, manual arts, and music.

The most frequent departments are: high school, elementary education, music, art and manual training, college, kindergartens, primary schools, county superintendents. Less frequent departments are: graded schools, school boards, rural schools, secondary schools, city superintendents, history, science, mathematics, grammar grades, physical training, child study, normal school work, drawing, elocution, and reading. Missouri, Indiana, Louisiana, New Hampshire, and Colorado have departments of the classics; Maryland and Indiana, study of English; Maryland, study of history; Maryland, Colorado, Wisconsin, and Indiana, modern languages; Indiana and Arkansas, athletics; Illinois and Nebraska, principals; Arkansas, county examiners; Michigan, school commissioners and education of the deaf; Michigan and Colorado, library; North Dakota and Pennsylvania, directors; Alabama, industrial arts and school improvements; Wisconsin and Pennsylvania, nature study; Wisconsin, domestic science; Connecticut, penmanship; New York, commercial teachers. Louisiana has a department in civic effort.

EDUCATIONAL COUNCILS.

A council of education is a prominent factor in California, Colorado, Massachusetts, New Hampshire, Wisconsin, Iowa, Mississippi, Missouri, New Mexico, and Idaho. The aim of the educational council in these States varies somewhat, but may be tersely summed up in the words of the Idaho constitution: "To direct the educational agencies of the State and to prosecute original investigation in education." In several States it serves as a central body for the affiliation of various educational and semieducational bodies. The membership is generally made up of representatives from the various departments of the association, from affiliated organizations, colleges, and other educational bodies.

The council in Massachusetts aims to unify and secure the cooperation of all the educational agencies of the State, to discuss and devise plans for increasing the efficiency of education, and to promote necessary legislation. The membership comprises the president of the state association and the secretary of the state board of education, ex officio; 24 delegates from the state teachers' association; 5 each from the New England Association of Colleges and Preparatory Schools, the Massachusetts Schoolmasters' Club, and the Massachusetts Superintendents' Association; 3 delegates each from the New England Normal Council, the High School Masters' Club, the Boston Association of School Principals, the Boston Teachers' Club, and the Harvard Teachers' Association; 1 each from the various county associations and any other educational organizations desiring to be represented, provided that the total membership shall not exceed 100.

The membership of the Missouri council comprises 3 members of each department, 12 members elected at large, 4 each year for a three-year term, and the following ex officio members: College presidents of the Missouri College Union; dean of Teachers' College and normal presidents, presidents and ex-presidents of the Missouri State Teachers' Association, ex-state superintendents, city superintendents, and assistant superintendents.

The Colorado Association Council is composed of representatives of the sectional departments on a ratio to be determined by the directors and revised by them every three years. The council itself elects 6 members. This council considers matters referred to it by the associations; communicates with the directors respecting the work and welfare of the association; discusses advanced educational topics; proposes educational reforms in legislation and practice; stimulates and maintains a local interest in the National Educational Association; and cooperates in every practical way with the progressive educational forces of the State and county.

Iowa provides an educational council, of which the superintendent of public instruction is chairman. The elective members are: six to be elected from the association, 6 from the college and university department, 6 from the county superintendents' department, 6 from the normal and secondary department, 12 from the elementary and grade department, 6 by the educational council itself. The term is three years. Members, except those elected by the council itself, are not eligible to immediate reelection. The duties of the council are to recommend ways and means to adjust and control the educational forces and agencies of the State.

The Mississippi council consists of 15 members of the association, elected for six years, half by the council and half by the executive committee. All ex-members become honorary members.

Wisconsin has 9 members in its council, representing the various educational interests of the State. The appointments are approved by the association. The council acts on resolutions referred to it involving educational questions. The council may recommend any educational questions upon which action may be desirable.

The California council of education consists of the members of the state board of education and 35 representatives elected by the association, 7 elected each year for five years. The council acts as a special educational advisory committee of the association, and its special duty is to report annually to the general association desirable legislation and ways and means for securing the same, together with pedagogical recommendations, which are the outcome of their conferences. California proposes to affiliate its various associations of teachers in an educational council.

The New Hampshire council consists of the state superintendent; 1 member elected annually by each county or district teachers' association; 6 members of the state association, 2 elected annually for a term of three years; 1 member from the association of academic and private schools, elected annually; 1 member from the state normal school; 1 member from each of the colleges—Dartmouth and the Agricultural and Mechanic Arts College. Each association or body represented in the council pays an annual fee of \$5 for each member representing it. This council chooses its own officers and adopts its own rules. It holds its meeting at least one month before the annual meeting of the state association, and reports to that body.

READING CIRCLES AND BOOK LISTS.

A number of state bodies conduct state reading circles. In Georgia the library board prepares annually a list of the reading matter for the pupils of the public schools and for the teachers. New York, Illinois, Kentucky, and Nebraska prepare lists of books suitable for children, and current juvenile literature. Other state associations that encourage reading circles are: Mississippi, Indiana, Missouri, Ohio, Maryland, Arkansas, Virginia, and Colorado.

COMMITTEES.

Committees differ in the several associations. Resolutions, auditing, necrology, legislation, and nominating are the prevailing committees. Other less popular committees are: enrollment, president's address, educational progress, printing or publication, and finance. New York has a committee to present at the final session a résumé of the annual meeting. New Jersey has also a committee on résumé, that prepares for publication abstracts of all papers read. Minnesota and Illinois have a committee to arrange for state representation to the National Education Association. Illinois has a committee on appropriations, that passes on proposed expenditures; Missouri, Ohio, and Iowa a committee on teachers' situations. This committee acts for persons wishing to teach and persons desiring to employ teachers. Illinois authorizes a committee on simplified spelling, the teaching of physiology and hygiene, and state course of study; Mississippi, normal schools; Alabama, memoirs and good of the profession; Wyoming and Vermont, school laws; Michigan, school commissioners; New Jersey, retirement fund; Wisconsin, honorary members; Louisiana appoints a committee on the investigation of school problems and a committee of parish managers to create an interest in the association and to secure members.

Except the nominating committee, almost invariably these committees are appointed by the president; New Hampshire and Louisi-

ana elect a legislative committee. In New Hampshire the president appoints a nominating committee of 10—1 from each county—and in Illinois 1 from each congressional district. In New York the president appoints a committee of 7, composed of at least 1 member from each of the special educational associations of the State, to present candidates for all offices except president. In Massachusetts the president appoints 14. Wisconsin and Ohio also appoint this committee. In Iowa each department selects 3 members of a nominating committee. New Jersey provides for a nominating committee of 1 man and 1 woman from each congressional district, elected by the members of that district. Independent nominations must be signed by 3 members from each congressional district. The Colorado association has a scheme of "nominators," 11 from the sections and the same number from the association, who nominate officers. Pennsylvania elects a nominating committee. The Idaho nominating committee consists of 2 persons elected from each authorized section and 1 person appointed by the president. Members of each congressional district in Missouri and Kansas elect 1 member, and in Nebraska 3 members, of the nominating committee.

OFFICERS.

The officers in most associations consist of a president, one or more vice-presidents, a secretary, a treasurer, an executive committee or a board of directors. Several States have a railway secretary or railway manager, an assistant secretary, a corresponding secretary, a recording secretary; a number have both a recording and a corresponding secretary. Indiana has a permanent secretary elected for life. Massachusetts has three assistant secretaries; New York elects an assistant treasurer; North Carolina and Tennessee, a secretary-treasurer; Arkansas, Georgia, and other States, a board of trustees; Maine and Connecticut, an auditor; Utah, a custodian, who is chairman of the auditing committee and has charge of all papers; Michigan, a superintendent of exhibits.

NOMINATION AND ELECTION OF OFFICERS—TERM.

Officers are, as a rule, elected annually by ballot where there is more than one candidate, or viva voce or by the ballot of the secretary where there is only one candidate for an office. Generally, candidates for office are recommended by the nominating committee, although in a number of instances nominations are made in open sessions. West Virginia, Maine, and Ohio elect by ballot or by such method as the association shall direct; the first State elects a secretary and treasurer for two years and nominates all candidates for office in open session. In some States, notably Wisconsin, Louisiana, and Kentucky, secreta-

ries are elected for three years. As a rule, the executive committee or board of directors are elected, although in a few instances they are appointed by the president. North Carolina elects all officers by ballot, unless otherwise determined by a viva voce vote of two-thirds of the members present. In New York the annual election of officers occurs between the hours of 11 a. m. and 2 p. m. on the second day of the sessions. A plurality vote elects. The election is under the direction of three inspectors appointed by the president. Voting is by ballot, unless waived by unanimous consent of the members of the association present. Michigan elects the president by ballot, a majority vote being necessary for a choice. The election takes place between 11 a. m. and 12.30 p. m. on the second day of the annual meeting. In Illinois the ballot is taken in such manner as the executive committee may prescribe. In South Dakota officers are elected by ballot, with polls open one and one-half hours. In Louisiana the names of persons nominated are placed upon a printed slip under proper heading, and members strike off the names of those for whom they will not vote. Polls are open to 8 p. m. of the day preceding the last day of the session.

In Wisconsin the president and one member of the executive committee are elected annually. All other officers are elected on nominations made by the committee on elections, consisting of 10 members, 5 of whom are appointed every year for a term of two years. This committee establishes polling places in the building in which general sessions are held, which are open from 9 a. m. to 5 p. m. Three judges are in charge of each polling place. Membership tickets have attached one nominating ballot and one election ballot for each officer to be elected. No other tickets are permitted. If any person receives a majority of the votes cast for any office, he is declared elected. If not, the two persons receiving the highest vote for any office are the nominees. A second election is then held on the second day, the names of the nominees being posted at the polling places and in other conspicuous places.

Minnesota nominates its candidates for the several offices at a primary election at an established polling place. A separate ballot is provided for each office to be filled. Candidates are presented by a committee on nominations, consisting of three members appointed by the president and one member from each of the various sections. Members may vote for candidates on presentation of membership certificate or other satisfactory evidence. The nominating committee presents to the convention the names of candidates securing more than 20 per cent of the total vote cast. The election is held on the last day of the convention, in a similar manner. The polling place is open from 9 a. m. to 2 p. m.

WHO MAY BECOME MEMBERS—CLASSES OF MEMBERSHIP.

Membership is generally limited to persons directly or indirectly interested in education. New York and Virginia elect only persons actively engaged in any branch of educational work. In Maryland all persons in any way connected with the work of public school education may be active members; all friends of education in the State, associate members; other distinguished persons, honorary members. Pennsylvania and Mississippi invite all friends of education; Indiana and Kansas, active friends of education; Wisconsin, Maine, and Idaho, persons interested in education; Michigan and Vermont, any person. New Jersey receives only teachers, principals, supervisors, superintendents, or persons holding certificates valid in that State; West Virginia admits to active membership persons engaged in educational work and to associate membership persons interested in educational work; Georgia extends membership also to persons associated with libraries and publications. In Virginia persons desiring membership in the educational association join a local association most convenient. Local associations may be organized by five eligible persons. Louisiana has an active and an honorary membership—active, composed of public school teachers and superintendents; honorary, of parish officers and private school teachers.

The usual classes of membership are active and associate, or active and honorary; occasionally active, associate, and honorary. Several States, notably California, Tennessee, and Pennsylvania, make no distinction. Most States provide for life membership, but this is contingent upon the payment of a certain fee. Ohio and Kentucky have a permanent membership for such as pay their dues regularly. New Jersey has two members at large.

DUES AND FEES.

In the majority of associations the annual dues are \$1; in Kansas, Utah, and Maryland, 50 cents; in a number of other associations, notably Maine, New Hampshire, New York, Rhode Island, New Jersey, Indiana, Michigan, South Carolina, and Wisconsin, the dues are 50 cents for women and \$1 for men; in Connecticut, 50 cents for men and 25 cents for women. West Virginia assesses active members \$1 and associate members 50 cents; Nevada, \$1 biennially. In a few associations applicants pay an enrollment fee and annual dues. For instance, in Minnesota, North Dakota, Illinois, and Georgia the enrollment fee is \$1 and the annual dues \$1. In North Carolina the enrollment fee is \$2 and the annual dues \$2; Kansas has a membership fee of \$1, dues 50 cents; Washington, an initiation fee of 25 cents, annual dues 25 cents; Vermont, membership fee, \$1 for men and 50 cents for women, annual dues the same. Local associations in Virginia assess

members 50 cents, half of which must be turned over to the state organization. The majority of States enroll life members for \$10; North Carolina charges \$25. In Colorado and West Virginia any member paying \$10 or \$1 annually for fifteen years becomes a life member. In California the life membership entails the payment of fifteen years in advance or 20 consecutive annual payments. In Nebraska the life membership is \$5; in New York, \$10 for men and \$5 for women. Massachusetts assesses \$1 for life membership. As there are no annual dues in this State, the board of directors has authority to levy an assessment, but no assessments have ever been levied. The revenues are derived from the State (\$300) and a collection authorized by tradition.

OFFICIAL NAME.

The official names of the several associations differ somewhat in phraseology. The Rhode Island teachers' association is "The Rhode Island Institute of Instruction," and the North Carolina association is "The North Carolina Teachers' Assembly." The Louisiana organization is "The Louisiana State Public School Teachers' Association," and that of West Virginia is "The West Virginia Education Association." Of the other organizations, the most popular title is: "State Teachers' Association," 22 having this name, as follows: Connecticut, Idaho, Illinois, Indiana, Iowa, Kansas, Maryland, Michigan, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Vermont, Virginia, and Wyoming. Nine are named "Educational Association," as follows: Alabama, Florida, Georgia, Kentucky, Minnesota, New Mexico, North Dakota, South Dakota, and Washington. Ten are named "Teachers' Association," as follows: Arizona, Arkansas, California, Colorado, Maine, Massachusetts, Mississippi, Ohio, Utah, and Wisconsin. Two—Pennsylvania and Nevada—bear the name of "State Educational Association."

CHARACTERISTIC FEATURES OF THE VARIOUS ASSOCIATIONS.

Characteristic features of the various state associations lend interest to this investigation. The Alabama association regulations differ from those of many States in that they invite each school board in the State to send at least one representative to the annual meeting, and limit papers to thirty minutes; discussions to ten. To settle difficult questions and to exalt professional ideals, Alabama has a code of ethics which every teacher in America should read twice each year. In this Commonwealth, as in other Southern States, there is a state association for colored teachers.

The Arizona association meets in connection with joint county institutes, and all join the association.

Arkansas rouses its teachers through vice-presidents in each congressional district and invites to membership persons interested in library work. The board of trustees controls the finances of the association, audits bills and accounts, and directs expenditures. At the opening session the chairman of the local committee presides until the president delivers his annual address.

California has very complete and specific by-laws. During the past four years the teachers' association in this State has, as one of its leading members writes, "abandoned the hit or miss manner of conducting the affairs of the association." Beginning with July 1, 1909, a secretary devotes all his time to the work of the association, at a salary of \$2,400 a year. The association also publishes a high-class educational monthly. Other characteristic features are: Nine directors elected by ballot, having corporate powers; president, sole charge of the preparation of the programme; secretary, elected by the board of directors; no nominating speeches permitted.

Colorado, in addition to its general sessions, assembles in 12 departments, mainly divided by branches of study that qualify their own members. Any department that fails to meet in separate session for deliberation and action forfeits its organization, as it does when it falls below 20 members.

Connecticut prefers a one-day session with meetings at both Hartford and New Haven. In 1908 the general meeting was held in New Haven in the morning and in Hartford in the afternoon. Sectional meetings were the reverse. The programme and participants were the same at each meeting. A business meeting was held in Meriden the following day, and this body was composed of 20 delegates, 10 elected in each meeting. The slogan of the conventions was inspiration, rather than information.

Florida secures a good enrollment through the efforts of the county superintendents.

Georgia also dignifies its membership by a code of ethics. A board of directors takes the place of the usual executive committee, and a board of trustees regulates the finances. On account of a hotel agreement one meeting in three must be held at Cumberland Island.

Idaho pays the expenses of teachers attending meetings of the association. Enrollment blanks are sent the teachers. A president is not eligible to reelection for three years.

The Illinois organization consists of the usual officers; a board of directors; 9 sections, 1 of which is a village principals' section. Illinois has a permanent committee of two members from each department that considers all questions referred to it by the association and reports thereon at the next annual meeting.

The Indiana association elects 7 vice-presidents and an executive committee of 7, distributed in the several congressional districts.

Unusual sections of the 16 in this association are: One for elocution and 1 for institute instructors. The latter section discusses the institute as an agency in education.

Iowa, on recommendation of 20 members of the association, adds a new department. At the request of 10 members, a round table may be established.

Kansas, at its meetings, has round tables on the several school branches, such as modern languages, foreign languages, mathematics, etc. The association presents a silk flag to the county having the highest enrolled membership in proportion to the number of teachers employed in the county. Two prize libraries are given for the best attendance. In reference to enrollment, the report says: "Professional benefits involve professional obligations; if we receive the benefits, let us not neglect the obligations." The vice-presidents of the association represent the executive committee in the several departments. Only persons employed in distinctively educational work are permitted to vote or hold office. The executive committee may expend \$100 to maintain state headquarters at the meeting of the National Education Association.

Kentucky regards its association as the teachers' parliament to fight its battles, and as such declares it should receive their moral and material support. It has a relief committee to assist worthy members. It has two classes of members, permanent and temporary. The permanent are those who agree to pay their dues yearly and may hold office. The executive committee consists of the regular officers, 1 member from the board of directors, and the presidents of the sections.

Louisiana instructs its secretary at the close of each annual meeting to furnish treasurer a list of absent members in order to collect unpaid annual dues. Members who are absent from three successive meetings and who fail to pay dues three successive years are dropped. This association elects two vice-presidents—one lady and one gentleman.

The Maine association urges library workers to join its ranks. The secretary registers members. The executive committee consists of the president, vice-president, secretary, treasurer, corresponding secretary, and one member elected by the association.

Maryland promotes pedagogical investigation and study in the branches of the public school curriculum through nine standing committees, appointed by the president. The topics are English, geography and history, mathematics, natural science, æsthetics, physical training, manual training, kindergarten, modern language. The committees report in writing at the annual meeting.

The Massachusetts association is under the general superintendence of a board of 40 directors, 20 representing the state association and

20 the various counties, the latter elected either by county associations or by the teachers of the counties.

Michigan conducts its association as a state institute. Every motion and resolution must be submitted in writing. All discussions must be without manuscript. Teachers may close their schools and attend without loss of pay, upon certificate of attendance. Various colleges, normal schools, societies, etc., announce reunions and banquets in the official bulletin. A significant feature at the 1908 meeting at Saginaw was school visiting.

Minnesota had for its theme at the 1909 meeting, "Efficiency in Education."

Mississippi has committees on superintendent's salary, course of study, and libraries. This association limits expenses of each annual meeting to two-thirds of the receipts of the previous meeting. Ten active members may ask for a department. It has a committee on investigations.

Missouri arranges extensively for the local entertainment of members. The executive committee is composed of 6 members. The expenses of each annual meeting are also limited to two-thirds of the receipts of each year.

Montana, in addition to strong programmes, has receptions, concerts, and indoor athletic exhibitions. In 1908 meetings of the Inter-scholastic Athletic Association, Montana State Library Association, and other societies were held at the same time. Its section meetings are reported as superb.

Nebraska eliminates factional controversy by having the members from each congressional district elect three members of a nominating committee that choose officers. Teachers from each congressional district assemble in separate bodies and each elects without nominations, first by informal ballot, and second by formal ballot. Receptions to societies and officers are features. Conferences are held in the professional training of teachers, in popular medical education, and in specific subjects, such as German, Latin, history, and other branches.

The Nevada State Educational Association meets biennially. In the odd year district institutes convene and work on instructions from and report to the state association. Its executive committee consists of one principal or superintendent of city graded schools, one principal of a county high school, one deputy superintendent, one grade teacher, one trustee, one member of the faculty of the University of Nevada, together with the president and corresponding secretary. This committee has power to organize district institutes.

New Hampshire issues an interesting "declaration of beliefs and desires," in which it reviews legislation enacted and the result. Its legislative committee comprises 1 member from each county in the State. The executive committee comprises the president, vice-president, secretary, treasurer, and 2 other members elected annually.

New Jersey provides for an enrollment committee consisting of not less than 1 member from each county. The legislative committee consists of 1 member from each congressional district. A desirable feature is a committee on educational progress that each year makes timely suggestions.

The New Mexico Association has in its council, besides the members from the association, as advisory members, such citizens of New Mexico as in the judgment of the regular members may be desirable.

The New York association has a committee of 61, one from each county, on legislation and professional interest. Other educational societies affiliate with the state association. The president, with the advice of the executive committee, arranges the programmes for the annual meeting. Four-fifths of the receipts from life membership are invested and only the interest used.

North Carolina elects officers *viva voce* by a vote of two-thirds of the members present. No member may vote in more than one department and each member may select the department. It emphasizes sectional meetings. The various sections hold from three to four meetings each, and general sessions are held only in the evening.

North Dakota by law authorizes the state superintendent to publish as public matter 2,500 copies of the proceedings of the state educational association. At the general meetings addresses are made by the presidents of the various departments. Associate members become active after paying dues three years.

Ohio compels permanent members, when dropped and reinstated, to pay dues in any year, together with all arrearage.

Oklahoma is slowly awakening to the need of a stronger state association, uniting the various educational elements of this progressive State.

Oregon, on account of geographical conditions and transportation facilities, has two divisions of the Oregon State Teachers' Association—the eastern and the western. They are separate and independent organizations. Committees are now at work on plans for uniting the two associations.

The Pennsylvania association permits its departments to hold regular and special meetings at such times and places as each may decide. Several of the departments meet at other times and at other places than the general meeting. This association has a permanent fund for educational research.

Rhode Island encourages, by committee, the study of marked educational movements. It also has a committee to promote the study of Rhode Island history.

The South Carolina educational societies, for the first time, met with the state association in a record-breaking meeting in the winter of 1908-9. Similar societies in other States are merely departments. Persons who desire to join the association certify in writing their intention to become permanent sustaining members. Members who desire to withdraw are required to notify the secretary before January 1 of each year.

South Dakota makes the state superintendent the legal agent of the association. Compensation of officers is determined by the executive committee. The convention designates who shall be members of each of the several departments, namely, county supervision, primary and kindergarten, elementary and rural, higher and secondary. If the departments grow too large, smaller divisions may be made. For the year 1902, and every six years thereafter, the association has the right to revise its constitution. It may amend it at any time.

The Tennessee association, in its laws, in addition to the usual duties, gives the executive committee power to audit accounts, revise proceedings, prepare programmes, and nominate officers. Its meeting must be held during the vacation period not later than August 1.

Texas, in spite of its size, enrolls at least a third of its teachers, and has enthusiastic meetings. Its purpose is cooperation among various factors. Texas has an executive board composed of one prominent teacher from each senatorial district that looks after educational legislation.

Utah is alone, I think, in having a parents' section. It also has arts and crafts, elocution, and physical culture sections.

The Vermont association is for instruction, interest, and acquaintanceship. The members of the board of directors are not allowed compensation for personal expenses for attendance at meetings of the board. The Vermont association places all ex-presidents residing in the State and engaged in educational work on the board of directors. The annual meeting shall continue two or more days.

Virginia strengthens the state organization by county and city organizations, auxiliary to the state organization. Each congressional district has a vice-president. Each vice-president is the stimulus for the district and reports to the president three times each year. In the state association there is one representative for every 25 members. Each member of the local association may vote unless there is a demand for roll call, when only representatives may vote. Local associations hold at least two meetings a year. The superintendent

of public instruction says in regard to the state association: "A considerable part of the progressive legislation enacted by the general assembly of 1908 was due to the effective work of the state teachers' association, through its local organization."

The Washington Educational Association, in 1906, abolished its educational council by amendment. One member of the executive committee must be a resident of the place where the annual meeting is held. No expense is incurred by the executive committee without the approval of the president.

West Virginia adopted a new constitution June 17, 1909, providing for five departments: City school administration, secondary education, elementary, normal, and county superintendence. The constitution provides for a June meeting, but the place of meeting is determined by the association. The executive committee must approve the programmes of sectional meetings.

Wisconsin arranges carefully details for the annual meeting. A bureau of information, a railway manager, a register, and guides help the unfamiliar. Entertainments, college alumni banquets, and receptions are special features. The treasurer gives a bond of \$2,000, the premium being paid by the association. Nonmembers pay 25 cents admission to general sessions.

The Wyoming association compels applicants who are elected members to sign the constitution. It has an amendment to its constitution stating that the president of the association shall not serve as a member of the executive committee.

In order more fully to present conditions in state associations as they are to-day, I sent a syllabus to the various States, asking questions on topics that seem essential to a proper organization. These questions roughly divide themselves into questions of membership and organization and means for maintaining the same; the time and place of meeting; the programme; the aim and the influence of educational associations and personal opinions of leaders. From a great number and variety of replies I have endeavored to summarize such as appear to me to be helpful in the study of the problem which is before us.

PERCENTAGE OF TEACHERS ENROLLED.

In the year 1907 Rhode Island led in the percentage of teachers belonging to a state organization. The percentage in that State was 81.4. Connecticut had 77.8; Utah, 67.6; Washington, 66.7; California, 60.7. Tennessee had the least enrollment. Pennsylvania, Georgia, Missouri, and Ohio, in an upward order, footed the list with Tennessee.

A detailed table of the number of teachers in each State, the number of members enrolled in the state associations for the year 1907, and for that of the last meeting, whether 1908 or 1909, follows:

Enrollment of teachers in the state associations.

State.	Number of teachers.	Teachers enrolled.	
		1907-8.	1908-9.
Alabama.....	5,800	1,103	1,850
Arkansas.....	8,297	485	691
Arizona.....	645	520	219
California.....	9,714	2,700	3,000
Colorado.....	4,940	2,025	2,325
Connecticut.....	4,884	3,800	4,550
Florida.....	4,083	500	350
Georgia.....	10,379	240	250
Idaho.....	1,955	325	200
Illinois.....	28,083	1,294	1,194
Indiana.....	16,671	3,450	3,458
Iowa.....	27,950	1,549	1,497
Kansas.....	12,568	1,200	446
Kentucky.....	10,259	475	1,240
Louisiana.....	7,205	1,863	1,649
Maine.....	6,879	1,500	1,800
Maryland.....	5,357	400	566
Massachusetts.....	14,778	1,500	1,400
Michigan.....	17,286	4,800	4,973
Minnesota.....	14,939	2,000	1,700
Mississippi.....	10,900	1,200	668
Missouri.....	17,838	665	1,237
Montana.....	1,788	100	300
Nebraska.....	10,059	2,000	4,086
Nevada.....	449	222	170
New Hampshire.....	2,347	1,100	1,072
New Jersey.....	10,553	4,157	5,563
New Mexico.....	1,065	500	500
New York.....	38,657	2,367	2,365
North Carolina.....	10,146	750	340
North Dakota.....	5,240	425	350
Ohio.....	26,517	1,000	1,500
Oklahoma.....	8,000	615	2,650
Oregon.....	4,243	1,200	600
Pennsylvania.....	34,013	824	2,137
Rhode Island.....	2,024	1,790	1,913
South Carolina.....	6,228	300	1,000
South Dakota.....	5,555	500	655
Tennessee.....	9,929	165	84
Texas.....	17,553	500	500
Utah.....	2,010	1,400	1,800
Vermont.....	3,179	1,139	932
Virginia.....	9,468	1,500	2,500
Washington (western division).....	6,524	4,005	4,225
West Virginia.....	8,262	450	600
Wisconsin.....	14,491	5,000	5,000
Wyoming.....	787	390	139

METHODS OF SECURING MEMBERS.

The methods employed in the several States in securing members are varied. In a few, little or no effort is put forth; in others, committees are constantly at work. On the whole, the answers to this inquiry are enigmatical. New Hampshire loyally responds: "Little, if any, urging required." In Idaho the expenses of the teachers are paid while attending such conventions. In Utah many school boards defray the expenses of the teachers. In Maryland solicitors canvass in each county. In Michigan the state department declares the meeting a state institute. In New Jersey a county chairman has charge and appoints any number of assistants.

Beyond these, the answers were more or less stereotyped. A few follow: "Notice by circular and bulletin;" through the newspapers;" "attractive programme;" "membership blanks sent to all teachers prior to the meeting;" "secretary visits county institutes;" "guarantee live meetings;" "print proceedings;" "personal appeal;" "appeal to loyalty," to which the writer facetiously adds, "which often is not great;" "assign programme parts to teachers in every part of the State;" "work it up at county institutes;" "city and county superintendents urge attendance." It was not stated how the city and county superintendents were enthused. From the South comes this comment: "Girls in abundance; but men—rare." Since girls fail to attract, all agree, I think, that the plan of Idaho and Utah commends itself as a surer means of securing a large enrollment.

TIME OF MEETING.

The proper time for holding the meeting is another mooted question. A canvass of 47 States and Territories disclosed the fact that 2 associations hold their meetings in April, 1 in May, 9 in June or early in July, 5 in October, 7 in November, and 23 in December. In January, February, March, August, and September no meetings are held. As is readily seen from these figures the sentiment for a convention at the close of the school term is rapidly dissipating, and the preponderance of opinion is largely in favor of December, especially the Christmas holidays, although Alabama reports that the thing that has helped its association to grow more than any other one thing was the change in the time of meeting from June to April. The constitution of the New Hampshire association requires that the annual meeting shall be held on the Friday and Saturday nearest the 20th of October. Many educators feel that the work of the convention is not entirely that of a summer-day picnic, and yet social features, such as the reunions in Michigan and the receptions at Atlantic City, N. J., and at other state meetings, are very helpful in acquainting members with one another.

PLACE OF MEETING.

The place of meeting often affects the success or nonsuccess of state educational meetings. The following States hold them in the same place each year: Arkansas, Colorado, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, New Jersey, New York, Rhode Island, and Wisconsin. Massachusetts usually holds its meeting in Boston; Minnesota, in St. Paul; and Nebraska and Ohio, usually in the same place. South Dakota, in its constitution, directs that the annual meeting be held in cities of 5,000 or more population; North Dakota, alternately at Grand Forks and Fargo. Of the 16 usually following this custom

of holding the meetings in the same place, 12 state that it is a satisfactory plan, 2 think it unsatisfactory, and 2 are noncommittal. As a rule, the reason given for holding the meeting at one place is that hotel facilities demand it. Of the 29 States that hold meetings in different places each year, 22 feel that this is the proper method; 5 think it is not; 2 are doubtful. It is evident that both plans meet with the approval of those who have them; consequently, the question of place of meeting does not enter very largely into the success of a meeting, if the hotel problem is eliminated, although it seems to me that meetings in different parts of a State arouse interest from time to time in the several sections of a State. Possibly no State is so fortunate in its permanent place of meeting as is New Jersey. Each year this association gathers at its delightful sea resort, Atlantic City.

TREND OF THE DISCUSSIONS.

The programmes in the different associations vary. Industrial and vocational education is the most popular topic. In reply to the question, "What do you emphasize in the programme?" the two general underlying themes in the replies are: The attitude of the teachers toward the profession, and the problems of instruction. Six States advocate the pedagogical side alone, and a very few the administrative. California, in one year, emphasized the spiritual element in education; in another year, sociological tendencies; Montana, industrial education; New Jersey, physical and industrial education; New York, everything new; Oregon, means of raising revenue; Texas, a certain theme each year; Virginia, progressive legislation; Washington, sectional meetings; West Virginia, school administration; Wyoming, state-wide interest in the schools; Pennsylvania, pressing problems in state education. Still others emphasize the inspirational side of teaching; finance; preparation of teaching; consolidation of schools; current educational problems; what conditions demand; what is of immediate importance; state problems.

EMPLOYMENT OF OUTSIDE TALENT.

In regard to the use of outside talent on the programme, probably Connecticut, Rhode Island, California, Iowa, and Minnesota report the largest proportion of outside talent. Connecticut reports the best and largest meeting ever held was when only outside talent was employed. Georgia, Oklahoma, and New Mexico report no outside talent. Other States use from 2 to 50 per cent. Florida reports that outside talent introduces and emphasizes new phases of education and arouses general enthusiasm. Kansas believes that outside talent pays; Kentucky, that local work is best, but that outside talent adds the "sauce;" Virginia, that local talent stimulates local effort and

reaches local conditions and that outside talent imparts inspiration and gives a basis for comparison. Practically the unanimous verdict is that both foreign and local people are desirable, each supplementing the other; that local men are best adapted to discuss local conditions, and outside men to impart breadth, interest, and inspiration.

ATTITUDE OF COLLEGES AND PRIVATE SCHOOLS.

As a rule, colleges cooperate with the state associations; private schools do not. The almost unanimous verdict is that colleges are helpful, but that private schools hold aloof. Of the States canvassed, 2 report that private schools are active in association affairs, and 29 that colleges are active. In 1 State, however, only 8 of 200 college instructors are enrolled. Oregon and several other States have a department in secondary education. In Illinois colleges have a section of their own. One State reports that the teachers in the colleges take more interest than the teachers in the common schools. In Louisiana private school teachers may only be honorary members.

AIM OF THE SEVERAL ASSOCIATIONS.

In order to probe the problem of state educational associations deeper, a few opinions in regard to the aim of the several associations as expressed by either state superintendents or officers of associations, although more or less commonplace, are hopeful. For instance, Maryland reports its aim "to unite and cement our educational forces;" Michigan, "to stimulate an appreciation of the responsibilities and opportunities of the profession;" New York, "to give trend to progressive movement;" Washington, "unity and harmony in educational work;" Montana, "constructive education." Others are thus phrased: "To create educational sentiment;" "exchange ideas;" "inspiration;" "stimulation;" "widens teachers' views;" "unity in school work;" "improve standards;" "wider exchange of views;" "educational progress;" "elevate the character and advance the interest of teaching." Illinois and South Dakota laconically state their objects to be "the professional improvement of members and the advancement of school interests."

The New Mexico association in its prospectus urges teachers to attend the meetings of the association thus aptly: "It is the teacher's professional duty; it adds to one's resources; it clarifies one's knowledge; it renews one's enthusiasm; it increases one's optimism; it dispels the blues; it helps to keep one out of the ruts. It may not remove gray hairs from the head, but it will help to keep gray hairs out of one's methods."

It seems to me that the constitution of the New Jersey Educational Association covers the ground fully, thus: "To promote the educa-

tional interest of the State; to secure and maintain for the office of teaching its true rank among the professions; to promote and guard the interests of public and state school teachers by means of instruction, conference, and united action."

INFLUENCE UPON LEGISLATION.

As a legislative and political factor educational associations are not always potent. Possibly the New Jersey association is one of the most active in the line of influencing legislation for pupils, teachers, and schools. Much of the progressive school legislation on the statute books of this State has been due to its active state association. This association was called in extra session May 29, 1909, to protest and use its influence against the ruthless dismissal of teachers by boards of education on account of the thirty-five-year service law. Five hundred dollars was appropriated for expenses and counsel fees.

New York, Virginia, Kentucky, California, Nevada, South Dakota, and Mississippi associations have also done much to help legislation. The influence in Pennsylvania has been more or less negative. Of the States canvassed, 28 reply that they influence state legislation more or less, 12 vote "no," and 6 are silent. California replies, "Voice very potent;" Indiana, "Very large factor;" Mississippi, "Very greatly;" Nevada, "Initiates everything done;" New York, "Does not hesitate;" South Dakota, "All legislation has had its origin in the efforts of the association." Kentucky reports, "No important legislation has been had except by its approval." Other States, however, are not so optimistic. Maine participates in and influences legislation very little directly, and no specific acts have been passed through any direct influence of the association. Another association tries, but has little direct influence. Still another is unable to determine its influence. Still another, "Can't budge the gang." Others memorialize the legislature with little effect; and thus the story runs. It is evident, however, that without state associations much less legislation would be on the statute books to-day.

Specific acts passed through the influence of associations are numerous. Kentucky enthusiastically exclaims, "Not room enough." New York cordially reports, "Too numerous to mention in one line." South Carolina reports that it helped the high-school act; South Dakota, compulsory-attendance certification of teachers by the State; Virginia, normal education; Washington, increase of 66 $\frac{2}{3}$ per cent in the state tax; West Virginia, revised school law; Wisconsin, compulsory education; Alabama, redistricting act, uniform text-books, uniform examination; California, increase in state and county school funds, state high-school law, compulsory-education law, act raising standard of certificates; Georgia, county institutes, graded course of study, summer schools; Illinois, creation of educational commission;

Indiana, normal-school laws, wages and qualification laws; Iowa, state examination and certification of teachers, compulsory-education and library laws; Kentucky, state normal schools and state university, new and modern trustee system, county high schools, truancy laws; Maryland, minimum-salary law; Minnesota, library law, state aid, better factory and truancy laws, free text-book law; Missouri, compulsory-attendance law, library law; New Jersey, retirement fund, tenure-of-office act, thirty-five year service law, medical inspection. In one State the result of one meeting was reported as four marriages and one divorce.

DESIRABLE AND UNDESIRABLE FEATURES.

The persons interrogated were urged to give desirable and undesirable features in their respective associations. Washington and Kentucky write: "Greatest single educational factor in the State;" Wisconsin, "positively great, both to teachers and general public;" Alabama, "leading force in educational advancement;" Florida, "the school interests of the State can not afford to be without it;" Illinois, "absolutely necessary for progress;" Mississippi, "would lose much of inspirational spirit without it;" Nebraska, "no progressive State should be without it."

Other desirable features read thus: "Brings teachers together," "calls attention of people to educational forces," "definite programme," "well-organized departments," "publication of proceedings," "study of vital educational problems," "more teachers participating," "good programmes," "receptions," "time for social intercourse," "short speeches rather than papers," "unity," "cooperation," "cooperation of state department," "enthusiasm," "sympathy for each other," "best men on the programme," "live topics," "renewal of old acquaintanceship and making new friends," "wears away wrinkles," "opportunity to get a good wife," and "better than an operation for the 'set' teacher."

Undesirable features read thus: "Politics frequent," "schools that have hampered," "political ax grinding," "factional spirit and sectional feeling," "attempting to usurp the responsibilities of the legislature," "overloaded formal programmes," "long papers," "Chautauqua features," "meddling of school-book agents," "too many subjects," "too great a variety of cliques," "rivalry between institutions," "acrimonious debate," "lengthy papers," "monopolistic college element," "lack of definiteness of purpose," "too many side attractions," "long-winded speeches of persons not in schoolroom," "a dominant factor for selfish interests," "dry papers," "the know-all," "the old fogey." The answers invariably are "indispensable," "a good thing," "very great," "helpful," "inestimable."

GENERAL OBSERVATIONS—OUTLOOK FOR THE FUTURE.

The tenor of these fragmentary opinions, in my judgment, is exceedingly encouraging. In spite of direful prophecy, the state association survives and thrives; in spite of discontented murmuring it is a factor for progress; and in spite of the disgruntled carper, it will be the forum for the solution of the problems affecting the constructive reorganization of the public-school system in the States. The omens are entirely propitious. To be sure, many vexatious and discouraging problems confront it. The most distressing one, unquestionably, is its seeming inability to unify its forces. With less than 10 per cent of the half million teachers in this country regularly enlisted under its banner, little wonder that often its influence is imperceptible. With 40 per cent of the teachers only temporarily and occasionally enrolled, little wonder that its functions, as one critic puts it, are "decidedly sporadic." From every section of this land the report is: "The rank and file are indifferent; they see no immediate return; hence they are unwilling to build for the future, especially since that benefit may be for another." This selfish indifference is due chiefly to the fact that the average professional life of a teacher is four years. If one attends the meetings of two conventions five years apart, one is almost a total stranger. With the teaching force made up chiefly of men awaiting an opening to a more lucrative profession, and women awaiting an opportunity for the less distressing duties of wifehood, this problem of indifference is formidable. It will be met wholly only when teaching occupies its rightful place and men and women teach as they would practice law and medicine or preach the gospel. When once teachers feel the responsibility of their work as do men and women in other vocations, when their loyalty is no longer divided, and when the general public insists on discarding the incompetent and the favorite as a teacher, then the educational association will mean more to the teacher and to education. The solution, in my opinion, lies in placing teaching on such a plane that the indifferent and disloyal will soon fall by the wayside.

It is asserted, too, that the state educational association often is dominated by selfish and ambitious persons, and that these persons use the organization to further their own aspirations and not to uplift the membership nor to forward the profession; that often the association becomes the platform for persons who wish to exploit theoretical devices rather than for those who desire to discover the fundamental elements of pedagogy; that the advocates of delightful expedient are preferred to the expounders of rational principle. These are criticisms that are only too true, but they are not irremediable. Leaders of educational organizations must correct them if they would command, and look beyond self and beyond the oppor-

tunist. To be sure, with so very many who do not feel the least responsibility, an organization naturally drifts into the hands of the interested, the few who by choice or by compulsion survive in teaching. It behooves these few, however, to respect the rights of temporary teachers. It behooves them to recognize on their programmes those who have a message, and in the committees those who are willing to work. It behooves those who are ignored or timid to assert themselves, to make themselves felt. Of course, at present salaries, the large majority of teachers can not become prominent in any state organization. They are fortunate if they can attend several meetings in a lifetime. This, however, does not prevent them from giving the association loyal support. With a loyal membership an association soon becomes an influence that will uplift the teacher; will uplift teaching. Wherever teachers are alive to their honest interests, there their conditions improve. "The most difficult legislators to convince," said a prominent New Jersey educator to me recently, "are the members from the districts where the teachers are asleep professionally." A prominent educator in my own State recently remarked: "I will not urge my teachers to join the state association; they need their dollars elsewhere." In this same Pennsylvania we ask, "Why do our teachers go to New Jersey?" They go because of improved conditions; I went there—for my life partner. I suggest that you go there for like reasons.

This review discloses the fact that most of the associations are striving to be helpful factors in educational work. Each in its own way is doing much to improve school conditions. The pressing inquiry now is, Would an organization of officers of state associations affiliated with the National Educational Association be helpful? In my opinion such a union would help to solidify the forces contending for the true and defeat the forces contending for the false. In union there is power. In the words of the revered Lincoln, if we would succeed, we must "keep peggin' away; keep peggin' away."

Officers of state teachers' associations.

[Prepared in the Bureau of Education.]

State.	Year.	President.	Secretary.
Alabama.....	1909-10	N. R. Baker, Ensley.....	W. C. Griggs, Birmingham.
Arkansas.....	1909	Dr. Henry S. Hartzog, Arkadelphia.	Miss Mayo Rascoe, De Witt.
California.....	1909	E. Morris Cox, San Rafael.....	L. E. Armstrong, Alameda.
Colorado.....	1909		W. W. Remington; headquarters, 408 Charles Building, Denver.
Florida.....	1907-8	William M. Holloway, Tallahassee.	R. L. Turner, Inverness.
Georgia.....	1908-9	C. B. Chapman, Macon.....	
Illinois.....	1909	C. M. Bardwell, Aurora.....	
Indiana.....	1909	George W. Benton, Indianapolis..	Elizabeth Hull.
Iowa.....	1909	E. J. H. Beard, Newton.....	O. E. Smith, Indianola.
Kansas.....	1909	C. S. Risdon, Independence.....	

Officers of state teachers' associations—Continued.

State.	Year.	President.	Secretary.
Kentucky.....	1908-9	H. C. McKee, Frankfort.....	T. W. Vinson, Frankfort.
Louisiana.....	1908-9	Warren Easton, New Orleans.....	Nicholas Bauer, New Orleans.
Maine.....	1908-9	William H. Brownson, Portland..	
Maryland.....	1908-9	Miss Sarah E. Richmond, Balti- more.	Hugh W. Caldwell, Chesapeake City.
Massachusetts.....	1909	C. B. Ellis, Springfield.....	
Minnesota.....	1909		Prof. J. M. Guise, St. Paul.
Mississippi.....	1908-9	T. P. Scott, Brookhaven.....	John T. Connell, Gulfport.
Missouri.....	1909	B. G. Shackelford, Cape Girardeau.	E. M. Carter, Jefferson City.
Nebraska.....	1909	A. L. Caviness, Fairburg.....	
Nevada.....	1909	Romanzo Adams, Reno.....	Helen Chartz.
New Hampshire.....			
New Jersey.....	1908	James E. Bryan, Camden.....	Lewis C. Wooley, Trenton.
New Mexico.....	1908	C. O. Fisher, Raton.....	W. E. Garrison, East Las Vegas.
New York.....	1909	Charles T. MacFarlane, Brockport.	R. A. Searing, North Tonawanda.
North Carolina.....	1909-10	D. Hill, Raleigh.....	R. D. W. Connor, Raleigh.
North Dakota.....	1909	A. P. Hollis, Valley City.....	C. R. Travis, Mayville.
Ohio.....	1908-9		F. E. C. Kirkendall, Chillicothe.
Oklahoma.....	1908	Charles Evans, Ardmore.....	Maude E. Widaman, Anadarko.
Oregon.....	1909	W. W. Wiley, Newburg.....	L. A. Wiley, Shaver School, Port- land.
Pennsylvania.....	1909-10	Charles Lose, Williamsport.....	J. P. McCaskey, Lancaster.
South Dakota.....	1909	W. H. H. Beadle, Madison.....	J. Fred Olander, Pierre.
Tennessee.....	1908	W. N. Billingsly, Spencer.....	P. L. Harned, Clarksville.
Vermont.....	1909	Isaac Thomas, Rutland.....	
Washington.....	1909	W. E. Wilson, Ellensburg.....	O. C. Whitney, Tacoma.
West Virginia.....	1909-10	H. B. Work, Wheeling.....	C. R. Murray, Williamson.
Wisconsin.....	1909		Katharine R. Williams, Milwau- kee.
Wyoming.....	1909	Charles O. Merica, Laramie.....	

CHAPTER IV.

EDUCATION IN HAWAII.

The following information relating to the schools and the school population in the Territory of Hawaii is taken from the report of the superintendent of public instruction to the governor of Hawaii for the biennial period 1907 and 1908.

A comparative study of the enrollment in the public schools of the Territory for the last five years shows that there has been an increase in attendance of 24 per cent, five nationalities representing over 90 per cent of the school enrollment as follows:

	Hawaiian.	Part Hawaiian.	Japanese.	Portu- guese.	Chinese.
1904.....	4,159	2,314	2,642	3,064	1,243
1905.....	4,119	2,477	3,198	3,299	1,355
1906.....	4,106	2,460	3,828	3,204	1,594
1907.....	3,962	2,514	4,547	3,476	1,927
1908.....	3,959	2,556	5,479	3,655	2,096

Of the increase during the last year, 68.33 per cent were Japanese; 13.12 per cent Portuguese; 12.38 per cent Chinese. The above nationalities show an increase, with the exception of the pure Hawaiian, which is steadily decreasing from year to year. During this same five-year period the amounts expended for school purposes, aside from the loan fund, were:

1903-4.....	\$409,048.84
1904-5.....	336,358.59
1905-6.....	361,458.99
1906-7.....	349,933.14
1907-8.....	467,232.85

These figures show a cost of instruction per capita as follows:

1904.....	\$28.27
1905.....	22.12
1906.....	22.42
1907.....	20.41
1908.....	25.16

Number of schools, teachers, and pupils in the Territory, December 31, 1908.

	Schools.	Teachers.		Total.	Pupils.		Total.
		Male.	Female.		Male.	Female.	
Public schools.....	153	107	382	489	10,652	8,822	19,474
Private schools.....	56	73	196	269	2,839	2,543	5,382
Total.....	209	180	578	758	13,491	11,365	24,856

*Comparative table of nationalities of pupils attending school in the Territory,
December 31, 1908.*

Nationality.	Public.	Private.	Total.
Hawaiian.....	3,959	808	4,767
Part Hawaiian.....	2,556	1,135	3,691
American.....	457	542	999
British.....	103	86	189
German.....	153	112	265
Portuguese.....	3,655	1,122	4,777
Scandinavian.....	49	18	67
Japanese.....	5,479	616	6,095
Chinese.....	2,096	701	2,797
Porto Rican.....	325	122	447
Korean.....	145	23	168
Other foreigners.....	497	97	594
Total.....	19,474	5,382	24,856

Ages of all pupils in all schools of the Territory of Hawaii, December 31, 1908.

PUBLIC SCHOOLS.

	Age.				Total.
	Under 6 years.	Between 6 and 8 years.	Between 9 and 15 years.	Above 15 years.	
Boys.....	122	3,714	6,297	519	10,652
Girls.....	113	3,135	5,140	434	8,822
Total.....	235	6,849	11,437	953	19,474

PRIVATE SCHOOLS.

	Age.			Total.
	Under 6 years.	From 6 to 15 years.	Above 15 years.	
Boys.....	480	1,763	596	2,839
Girls.....	555	1,643	345	2,543
Total.....	1,035	3,406	941	5,382

TOTAL IN PUBLIC AND PRIVATE SCHOOLS.

Boys.....	602	11,774	1,115	13,491
Girls.....	668	9,918	779	11,365
Total.....	1,270	21,692	1,894	24,856

Percentage table, December 31, 1908.

Nationality.	Attendance, 1908.			Percent- age nation- alities public schools.
	Public schools.	Private schools.	All schools.	
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Hawaiian.....	16.01	3.25	19.26	20.32
Part Hawaiian.....	10.28	4.56	14.84	13.13
American.....	1.83	2.18	4.01	2.35
British.....	.41	.34	.75	.53
German.....	.61	.45	1.06	.79
Portuguese.....	14.70	4.51	19.21	18.77
Scandinavian.....	.20	.07	.27	.25
Japanese.....	22.04	2.47	24.51	28.13
Chinese.....	8.43	2.82	11.25	10.76
Porto Rican.....	1.30	.49	1.79	1.67
Koreans.....	.58	.09	.67	.74
Other foreigners.....	1.99	.39	2.38	2.56
Total.....			100.00	100.00

Number of teachers in public and private schools, 1908.

Nationality.	Public schools.	Private schools.
Hawaiian.....	72	11
Part Hawaiian.....	142	22
American.....	180	168
British.....	35	16
German.....	7	2
Portuguese.....	33	11
Scandinavian.....	7	2
Chinese.....	8	12
Other foreigners.....	5	22
Total.....	489	266

CHAPTER V.

EDUCATION IN THE PHILIPPINES.

The following extracts have been selected from the reports of the secretary and director of public instruction of the Philippines on account of the information they convey of the social conditions in the islands as affected by American customs and ideas, and especially by the introduction of the American school system. The documents relate to the year 1908.

The attitude of the Filipinos toward the new education is shown in several acts of the Philippine assembly, a newly formed body, whose representatives are elected by the direct vote of the people. These acts are therefore significant of the real feeling of the people in the matter. The secretary writes as follows:

The first act of the Philippine assembly and of the Philippine legislature, No. 1801—known as the “Gabaldon Act”—appropriated the sum of ₱1,000,000 (\$500,000) for the construction of public-school buildings in the barrios, or outlying hamlets, of the islands. One-fourth of this amount was made available on January 1, 1908, and one-fourth on the first day of each of the three next succeeding calendar years. * * *

The passage of this law by the newly formed Philippine assembly has proved of great moral support to the public-school system, and has done much to put at rest statements and arguments to the effect that public education was not really desired by the Filipino people.

Throughout the entire session of the Philippine legislature the public-school system has received the warmest support from the assembly, both as a body and individually, and the effect of this attitude on the part of men of prominence and influence throughout the islands can not but make for the improvement of the schools and the spread of popular education in the English language. * * *

SCHOOL DIVISIONS.

Public educational work in the islands is now performed under the bureau of education, with a central office located in Manila, having 36 divisions, each in charge of a division superintendent, embracing in all 460 school districts, each in charge of a supervising teacher. The union of the provinces of Benguet and Bontoc in the “mountain (school) division,” and of the province of Romblon with that of Capiz, reduces the number of school divisions to 36—not counting

the Moro Province. The total number of schools in operation during the past year was as follows:

Kinds of schools.	School year.		Increase.
	1906-7.	1907-8.	
Primary schools.....	3,435	3,701	266
Intermediate schools.....	162	193	31
Arts and trades.....	32	35	3
Agricultural.....	5	12	7
Domestic science.....	17	30	13
Provincial high schools.....	36	38	2
Total.....	3,687	4,009	322

SCHOOL-CONSTRUCTION WORK.

Since the creation of the present bureau of education there have been constructed in these islands a total of 2,696 schoolhouses of all kinds. In the year 1903 the number constructed was 479; in 1904, 754; in 1905, 464; in 1906, 298; in 1907, 269; in 1908, 432. According to the best information obtainable there were 726 public schools in existence at the time of the American occupation of these islands. The school-construction work carried on during the years 1907 and 1908 and that at present going on is of the most permanent and substantial character, with the exception of certain municipal primary schools, which are built by the municipalities, and are, in many instances, constructed of light materials. During the last two years there were either built or purchased by the government 2 provincial high, 22 domestic science, 10 agricultural, 18 of arts and trades, 101 intermediate, and 548 primary schools, a total of 701.

On June 30, 1908, the following school buildings were either contemplated or in course of construction throughout the islands:

Intermediate schools.....	24
Arts and trade schools.....	18
Provincial high schools.....	11
Domestic science buildings.....	6
Agricultural buildings.....	5
Dormitories.....	4
Primary central schools.....	1
Group of industrial buildings.....	1
Total.....	70

TEACHING FORCE.

The teaching force maintained directly by the insular government is approximately 1,572, of whom 877 are American and 695 Filipino insular teachers. This is an increase of 51 American and 240 Filipino insular teachers over the force so provided on June 30, 1907. * * *

During the past school year 266 additional primary, 2 secondary, 31 intermediate, 3 arts and trades, 7 agricultural, and 13 domestic-science schools were opened.

ENROLLMENT AND ATTENDANCE.

School year.	Total enrollment.	Average total enrollment, by month.					Pupils belonging.	Average daily attendance.	Percentage of attendance.
		Boys.		Girls.		Total.			
		Number.	Per cent.	Number.	Per cent.				
1907.....	479,978	214,960	62	131,285	38	346,245	316,000	269,006	85
1908.....	486,676	212,273	63	126,970	37	339,243	320,560	270,732	85

The foregoing statement does not, of course, include the Moro Province. By "pupils belonging" is meant the pupils who remain on the rolls throughout the year, as distinguished from those whose attendance continues only during a portion thereof.

The percentage of attendance was generally good, the highest being in the city of Manila, 96 per cent, or a gain of 2 per cent over last year.

The lowest percentages of attendance, 70 and 71, were found in the provinces of Misamis and Albay, respectively.

In the primary, or municipal, schools the average total enrollment by months during the last school year was 323,327, as against 332,634 for the preceding year, or a decrease of 9,307.

As was stated in the last report of this department—

"Further enrollment under present conditions is practically out of the question, owing to the fact that the municipalities throughout the islands have not sufficient funds to employ a larger number of teachers or to construct additional primary schools in the towns and barrios; and inasmuch as the present force of municipal or primary teachers has as large a number of pupils as it can successfully manage, further increase in enrollment in primary work must await the coming of additional funds * * *."

FILIPINO STUDENTS IN THE UNITED STATES.

The current appropriation bill for the bureau of education provides for the maintenance in the United States of 130 Filipino students. Up to the present time some 60 students have returned to these islands upon the expiration of their terms of appointment, and all have received government appointments, as follows:

Teachers	40
Clerks	11
Constabulary subinspectors.....	2
Draftsmen	2
Pharmacist	1
Court interpreter.....	1
Agricultural foreman.....	1
Computer	1
Private secretary.....	1
Total.....	60

The services of the majority of these appointees have been characterized as either "good" or "superior," 7 of them being reported upon as "fair" and 5 as "poor."

PHILIPPINE MEDICAL SCHOOL.

Substantial progress in the organization, equipment, and operation of the Philippine Medical School has been made during the past year.

The teaching staff has been augmented by the appointment of associate and assistant professors, and by a lecturer in medical entomology. In February last the board of control authorized the appointment, for the school year 1908-9, of demonstrators in anatomy and histology, bacteriology and pathology, medical zoology, chemistry, and physiology, and first-class student assistants in anatomy, histology, bacteriology, pathology, medical zoology, clinical microscopy, and chemistry. The appointment of second-class student assistants in anatomy, histology, and clinical microscopy was also authorized. These positions are filled from the student body, the appointees being selected upon merit, and serving under the personal supervision and instruction of their respective professors. The demonstrators receive ₱480 per annum, first-class student assistants ₱240 per annum, and students of the second class ₱120 per annum. The compensation is necessarily small, but it is believed that the students thus selected will prove to be of decided value to the school.

The membership statistics of the school are as follows:

Students.	First year.	Second year.	Third year.	Fourth year.	Fifth year.	Total.
School year 1907-8.....	18	10	10	16	0	54
School year 1908-9.....	22	16	7	10	12	67

There were 2 government scholarship students and 1 woman student in the first-year class of 1907-8. The school year 1908-9, which opened on June 8, 1908, has no government scholarship students. Of the first-year class 2 are women.

The report of the director of education, Dr. David P. Barrows, contains important observations upon the social conditions in the islands after ten years of American occupation, which will be of interest hereafter to students of history, and numerous quotations are accordingly taken from that document.

Speaking of special conditions affecting schools, Doctor Barrows remarks that the economic distress of the country in recent years has placed great obstacles in the way of school organization. He specifies the fall in price of abaca and the failure of the rice crop, to which might be added the rinderpest. The unsettled condition of the population in many districts is another obstacle. There is a constant emigration from one place to another. One division superintendent reports that one "great difficulty that we have in reaching the whole population is the movement of the people to the country and the founding of numerous new barrios of 10 and 20 families. Under the Spanish Government the people were compelled to live in towns and were told where to build their towns, but now the towns are practically disappearing. There is not a town in the province that has not decreased in population since the American

occupation; some have lost 50 per cent of their people." Doctor Barrows goes on to say:

Social conditions are changing as well. In previous reports the director of education has discussed the social order in the Philippines, the relations of the small well-to-do and educated class of people, the "*gente ilustrada*," and the great mass of poor and ignorant, the "*gente baja*." A change in the direction of a more democratic social order is taking place. It is hard to discuss a matter of this kind except in general terms; figures are practically unobtainable, but it appears quite certain that a middle class is growing up and that the opportunities of this middle class have been greatly enlarged since the American occupation. This class includes shopkeepers, traders, small buyers, and merchants of every description, as well as such semiprofessional classes as teachers, clerks, employees of the new transportation systems, etc. Such men have much greater opportunities for gaining enlightenment and a steady competence than the rural toiler, especially if the latter is simply a tenant, owns nothing except his plow and nipa house, and passes his life in the condition of a bonded debtor to the landowner. I can not yet say whether or not the class of small farmers, or "*peasant proprietors*," is gaining in numbers, well-being, and independence. This class is numerous throughout the Ilocano territory and in some other parts of the islands, but in other provinces the rice is grown only on great estates, the cocoanut groves are owned solely by landed proprietors and cared for by tenants, while almost the entire sugar crop is raised on large haciendas by tenantry, who have no property and whose economic condition is most unpromising. The hope of the common people lies either in possessing small farms or engaging successfully in lines of trade which will contribute generally to the commercial development of the islands. These small farmers and these traders, both of them with enough education to keep their own accounts and manage their own affairs, independent of "*cacique*" or middlemen, are two classes which we hope to produce in great numbers through the work of the primary schools.

The political campaign of last year preceding the elections to the Assembly and of provincial and municipal officials had, in general, unfortunate effects upon the school work and school attendance. In many provinces it engrossed the attention of officials whose assistance in the conduct of school work during the first months of the school year was thus lost. In a number of provinces the canvass made by candidates representing hopes of early independence led the people to believe that the American Government in the islands would soon cease, English be no longer spoken, and that there was nothing to be gained by sending their children to the public schools. * * *

The success of the schools depends in a marked degree upon the attitude of the public, and especially the official class. Their successful conduct so far and their wide organization have been possible because the people have been exceedingly desirous of having them. The period of revolution and insurrection, disastrous as it was in many respects, was nevertheless a period of great social awakening; even the lowest classes were so stirred that the desire for instruction became general. There has been no compulsory-attendance law in the Philippines, and although municipalities, acting under the belief that they had a power conferred upon them in Spanish times, have sometimes compelled attendance by means of local ordinances, in general the schools have succeeded because of popular support. Local opinion needs to be constantly studied, interested, and informed. Division superintendents were directed this year to report with care upon this matter, which they have done. Most provinces

report the attitude of officials and people as favorable, helpful, and expressive of confidence in school work. There are, however, exceptions. In at least two provinces public feeling is apathetic, while frequently in a single or certain towns of a province there is an indifference or even a covert opposition. The causes of this apathy or opposition are several, and may be summarized as follows: In certain parts great ignorance and inertness characterize the population; there is no progress in any direction; the entire municipal life of the towns is neglected and inefficient, and in these places school work suffers with everything else. In certain other towns, and with certain individuals, there is an expression of disappointment with the work accomplished by the primary school. This disappointment rests largely upon the fact that the education of children seems to parents disappointingly slow. Under the system of dialect and catechism schools the child is able to acquire what are regarded as the essential rudiments in the space of about a year. In this time he learns the alphabet, the syllabary, and the catechism. This has been the primary education of many generations, and the feeling that a year or parts of two successive years is the right amount of time for a child to continue in school is deeply embedded in the minds of parents, who want the children at home to perform household duties and to assist in the care of animals. The public school system contemplates no decisive result short of the completion of three or four years of continuous instruction. The majority of children in attendance upon the primary schools leave at the end of one, two, or two and a half years without having obtained the rudiments of education proposed.

The director then speaks of the desire for dialect instruction, which, he says, has manifested itself chiefly in the Tagalog provinces around Manila. Its leading exponents are several Filipino papers in Manila. It is a cause of dissatisfaction with the public schools, though not widely spread, that the dialects are ignored in them, while English is taught. He continues:

However, taking all things together, it may be said that the attitude of the official class is really more friendly and certainly more helpful than at any previous time; that the attitude of the people is less enthusiastic, but with certain local exceptions hardly less really interested than formerly. The people have, however, become more critical, are disposed to view the work of the schools more intelligently, and to demand substantial results. Furthermore, the presence of American Government in these islands has given a tremendous impetus not merely to public education but to private instruction as well. The towns and villages abound with private schools and "colegios," varying in nearly every degree of size and pretentiousness. As a part of the general awakening of the people and as an expression of their eagerness for wider life and opportunity, these schools are a favorable sign. On the other hand, in too many cases they are not what they pretend to be, and may be even a positive detriment to the children that attend. Too frequently they are conducted simply as a means of livelihood for some man or woman who is a failure in ordinary lines of industry. These "dame schools" and more ambitious institutions draw many pupils from the public schools.

Nevertheless, I believe that the population of the islands view the public schools with satisfaction and confidence, and that this is sufficiently expressed in their readiness to sustain them by taxation, by the constant growth in the number of these schools, and by the increasing permanency of attendance.

It is unfortunate that the attitude of much of the American community and of the American press is outspokenly hostile to public instruction. The cry is

the common one, that the public schools interfere with the availability of labor, train boys away from the fields, and expend large sums of money which would better be devoted to industrial and commercial development. The Manila Times in recent months has engaged in a vigorous campaign with the professed object of debating down the insular appropriations for education. It was also represented that the present educational policy neglects the practical training for life or industrial efficiency; that the money devoted to public instruction is in large part wasted; and that a radical change in the amount and character of instruction should be made. I shall have to leave readers of this report to judge for themselves as to the truth or falsity of these criticisms. The proposition can not be maintained that the bureau of education has not had constantly before its view large social and industrial aims. It is sufficient to invite attention to previous reports of the director of education, where these subjects have repeatedly been considered.^a

So far as opposition to Philippine education is a reflection of that ungenerous and illiberal opposition to native enlightenment which too often takes possession of Americans domiciled in these islands, I believe it to be recreant to every principle of our national policy and to a due regard for justice. "Justice," in the language of Plato and Ulpian, "is the constant and perpetual purpose of rendering to everyone his own," and the attempt to deprive an aspiring and awakened people of general elementary schooling, to keep them ignorant and dependent, for the benefit of commercial interests, or to deny them liberty in the choice of their studies and professions, is palpably an attempt to exclude them from that which is rightfully theirs. * * *

PROGRESS MADE IN PUBLIC INSTRUCTION.

The bureau of education was organized in January, 1901; division superintendents were appointed and the work in most parts of the islands commenced during the succeeding year. Reliable school data hardly exists, however, before 1903, and our review of advance made will be confined to the intervening years. In 1903 it was estimated that there were in existence about 2,000 public schools; there were estimated to be about 3,000 Filipino teachers, and a school attendance of about 150,000. In 1904 the number of primary schools had increased to 2,233; the number of Filipino teachers to 3,584; and the school attendance for the month of March was 227,600. In March, 1905, the primary schools had increased to 2,727; the number of Filipino teachers had risen to 4,036; and the number of pupils in primary schools in the month of March, 1905, was 311,843. In 1906 the number of primary schools had increased to 3,166; the number of Filipino teachers to 4,719; and the school attendance for the month of March was 375,554. In 1907 the number of primary schools had increased to 3,435; the number of Filipino teachers to 6,141; and the enrollment for the month of March was 335,106. The year just closed has seen the conduct of 3,701 primary schools, with 6,620 Filipino teachers, and an enrollment for the month of March of 359,738, or 24,632 more than in March of a year ago. This is the bare record of a constant advance in the number of primary schools established and conducted, of the steady development of a corps of Filipino teachers more than twice as numerous as five years ago. As for attendance of children in school,

^a See "Aims of primary education in the Philippines" in report of general superintendent of education for 1903; the topic "What we hope primary instruction will do for the common people," and succeeding paragraphs in report of the general superintendent of education for 1905; see also an address before the American Academy of Political and Social Science at Philadelphia, April, 1907, "Education and social progress in the Philippines," published in *Annals*, Vol. XXX, No. 1, July, 1907.

if this is made the basis of our judgment, it rose very rapidly until the end of the year 1906, fell off somewhat for 1907, and rose again during the last year. While this falling off of attendance during the last two years is not a favorable sign, and is due in some cases to poor conditions and lack of school revenue; in others, to an unfavorable attitude of the people; it may be said that while the numbers are still somewhat less than they were two years ago, the number of children to a teacher is nearly 60, and the character of instruction has improved by the reduction of numbers. The pupils themselves are considerably further advanced and distributed in larger proportions in higher grades than they were two years ago. * * *

The primary course covers only four grades, but it provides nearly as much schooling as is obtained by the average person in the United States. In addition the four years' training in reading, language, and writing, three years of arithmetic and a geography primer, the primary course has been changed within the last two years in order to increase the amount of time given to training in handicrafts. Under the plan of industrial training, outlined in 1904, the primary schools have concerned themselves with arts and industries native to the population of the archipelago. The native arts are full of interest for the educator, the ethnologist, the economist, or the lover of beautiful things. They vary much from province to province and are frequently narrowly localized. The objects sought are to preserve, diffuse, and perhaps perfect the practice of such of these manufactures as particularly commend themselves for their utility or beauty. These handicrafts are, and should remain, household industries in which all members of the family can participate during the spare hours of the day when ordinary occupation can not be followed. Every agricultural family is possessed of considerable intervals between the seasons of planting and harvest, when there is abundant leisure, and this leisure can well be employed in the braiding of hats, the making of mats and bags, or the weaving of fabrics. It is very noticeable that communities now possessing these arts are conspicuous for their industry and well-being. Instruction in one or more of these native manufactures is given in nearly all primary schools during the first three grades of the course. The standard of attainment set may be judged from the following regulation: Industrial work designed to increase the efficiency of pupils and prepare them for better making a living or a home will be emphasized in this grade. This industrial work may vary according to the locality, but should in all cases be carefully prescribed by the division superintendent and report made to the director of education thereon. It is recommended that boys be taught to construct useful, even though rude, furniture and be practiced in the repair of fences, bridges, houses, and other buildings. For the girls, in addition to sewing and elementary domestic art, instruction should be given in domestic science, including housekeeping and cooking, home nursing, and sanitation. Training in weaving cotton and other fabrics on the upright loom is especially recommended for the girls of this grade.

The fourth year of the primary school is taking on a somewhat distinct character. All of the instruction given aims to prepare the young men and women for useful life in the rural towns in which they reside. The language and arithmetic work are based upon the industrial activities in which the pupils are engaged, or in which they will be employed after leaving school. A series of industrial leaflets takes up successively the ordinary activities of Filipino communities. In arithmetic the work has to do with buying and selling, with loans, commissions, with postal savings-bank accounts, homesteading land, keeping simple books, and a variety of other useful and practical matters which can be better judged by an examination of the primary arithmetic made for use in this grade. Simple physical geography or elementary physics will be taught

and a variety of natural phenomena closely allied to everyday life will be studied and explained, as well as ordinary mechanical devices and discoveries. The plan also contemplates a semester's instruction in hygiene and sanitation and of work by the boys in agriculture and special tool work, for keeping things in repair; and by the girls in housekeeping, sewing, and loom weaving. A special type of elementary industrial school is planned. These schools will teach only the one year—Grade IV. They will take boys and girls from the barrio schools of the town where they have had three elementary years of instruction, and by one year of special instruction help to make good farmers, tradesmen, or housewives in Filipino rural communities. Before such work can be widely prosecuted there must be a special building provided with suitable grounds and land, and there must be specially trained Filipino teachers. Current school revenues can not be spared to construct such school plants, but it is believed that this type of school will be entitled to receive benefit from the hoped-for congressional legislation setting aside for industrial schools the receipts from the sales of the public domain. Something is already being done to train the teachers. For the last two years training classes for just this work have been conducted in connection with the provincial high school of Pangasinan. Such teachers' courses are now about to be given in the Philippine Normal School and the Philippine School of Arts and Trades, and teachers appointed under scholarships for a year of study will in many cases take these courses. * * *

THE INTERMEDIATE SCHOOLS.

The intermediate schools were devised to fill the interval in the child's training between the brief course of the primary school and the secondary courses of the high school. Their character and studies were first outlined in a bulletin on courses of instruction of June 15, 1904, and their nature and work were discussed in the report of the general superintendent of education for 1904, pages 25-34. As a bridge between the primary and secondary schools these institutions continue the academic instruction in the ordinary branches. They were designed, however, to have a distinctive character of their own. Elementary science studies are emphasized—the first year, plant life; the second year, animal life; and the third year, human physiology. Agriculture and tool work for boys and housekeeping and domestic arts for girls are prescribed subjects of every fully organized intermediate course. In a country like the Philippine Islands industrial training can not be deferred until the high school, as it usually is in America; it must be carried down into intermediate grades if it is really to affect the standard of life and the industrial efficiency of any considerable part of the population. While in the United States trade schools and manual training schools have been generally high schools, here such instruction is intermediate. The secondary student receives much too advanced an education to ever follow a trade. Inducements in other lines of activity are too attractive, and if this teaching is to affect the class of skilled labor it must be given at least as early as in the intermediate course.

The first intermediate schools established were the reorganized high schools, which had been opened two years previously without a definite course of studies or entrance requirement. As these high schools have developed into secondary institutions, the intermediate school has continued as the preparatory department, although in several institutions—Manila, Iloilo and Malolos, Bulacan—the process of cutting out the intermediate school has begun.

In addition to these the plan has been to establish a considerable number of intermediate schools in other towns, especially in large towns so situated that

children from adjacent municipalities may attend. The limited resources available for public instruction have prevented the establishment of these schools in all the places where the demand for them exists, and at the present time it is impossible to afford this teaching to an increasingly large number of children who are prepared for it and desirous of receiving it. As it is, division superintendents have organized these schools more rapidly than we have had buildings, equipment, and teachers to properly conduct them. During the last year, in addition to the preparatory departments of 38 high schools, intermediate instruction was given in 160 schools. Of this number 36 had the three grades, V, VI, and VII; 64 two grades; and 60 but one grade. * * *

Each intermediate school is designed to have a shop, a school garden or farm, and a domestic-science building or a model native cottage. It is difficult to get well-trained and satisfactory teachers of these subjects, and the housing and equipment are somewhat expensive. Five years ago practically nothing of this kind was possessed nor was such instruction being given, but at the present time the intermediate department of every provincial high school, with three exceptions, has a well-equipped shop. Ninety-one teachers, including the instructors in the trade schools at Manila, Iloilo, and Bacolor, are engaged in giving shop instruction. In all of these schools there is an adequate supply of bench tools and equipment. In addition to tool work there is a graded course in drawing, including the elements of geometrical and elementary mechanical drawing. The three trade schools above mentioned teach a number of trades. In 11 of these schools there is woodworking machinery, consisting of engine, circular and band saws, planer, and lathes. Eleven more outfits of machinery were ordered last spring and will be installed during this school year. Ten of these schools have now excellent shop buildings and 13 more such buildings are under construction, with 7 more projected, funds and land being in part available.

Instruction in domestic science, which was not organized until about three years ago, has made hardly less satisfactory progress. Forty-one women teachers are at present engaged in giving this instruction to intermediate classes. A few of these have had special university training to fit them to be teachers of domestic science; the rest are women selected because of their skill in housewifery, their practical effectiveness, and their interest in the social side of Filipino life. Such instruction is now given in all but 5 high schools. In most instances special buildings have been provided, in two cases a model Filipino house has been built and a third one is in process of erection. The bureau of education supplies the outfit—stove, cooking utensils, and table service. Few features of our work have attracted more attention or have been so heartily welcomed as this instruction in housekeeping and household arts. Filipino girls are very ambitious to be good housewives and anxious that their homes shall accord with cultivated standard.

In agriculture less has been done. Here the difficulty is threefold—the obtaining of suitable farms and lands, the lack of experienced agricultural teachers, the undeveloped condition of scientific agriculture in the Philippines. Good farming lands adjacent to the sites for high or intermediate schools are very difficult to obtain. It seems desirable that such lands should also be susceptible of irrigation and of a character to admit of diversified agriculture. Many sites have been offered that are unsuitable. In a good many cases long delay is resulting from the difficulty in securing titles. We have suitable agricultural land at present only in 26 schools where the intermediate course is taught. There are 12 instructors in agriculture, most of them trained in agricultural schools in the United States, who are devoting all of their time this year to agricultural teaching and experiment. * * *

WHAT THE INTERMEDIATE GRADUATES ARE DOING.

A very important inquiry, and one which may well test the value of the instruction given in the intermediate school is, "What do the graduates do; do they apply themselves earnestly and successfully to useful lines of work, or do they fall into a life of useless ease or dangerous discontent as their critics prophesy?" An effort has been made to keep track of all of these graduates and record their careers.

Since March, 1905, about 3,000 young men and women have graduated from intermediate schools, 1,350 of them last March. Records as to what they have done are not complete, but what we do know of them is of interest and significance. Much the largest number have continued as students in secondary courses, over 1,800 are at present so engaged; 26 have been appointed to positions as government students in the United States; 16 have gone to the United States to study on their private means; a very large number (our records are incomplete, but nearly 500 are reported) are teaching in municipal schools. Seventeen are reported as farmers, 11 as merchants, 8 as municipal officials, and 89 as clerks.

Very few are reported as being idle or failures. * * *

THE SECONDARY COURSES.

These courses were outlined in Bulletin No. 7, June 15, 1904, and more fully in Bulletin No. 26, 1906. Four courses are at present provided. These are the course in literature, science, and history; the course in teaching; the course in commerce; and the course in agriculture. The literary and teachers' training courses are offered in nearly every high school; agriculture at present only as a course in the Philippine Normal School; commerce in only one school, the Philippine School of Commerce in Manila. The original plan of the high schools was to make them vocational training schools, and this plan is to some degree being realized. The number of students enrolled in secondary courses is still small. For the present school year (1908-9) there are reported in the first year 956, in the second year 590, in the third 232, and in the fourth 124. There have been so far 13 secondary graduates; from the Manila Normal School, 3 in 1907 and 1 in March, 1908; from the Cavite High School, 5 in March, 1908; and from the Iloilo High School, 4 in March, 1908.

As above stated, a high school is located in each provincial capital; their work is satisfactory, and in the majority of cases suitable buildings and grounds have been secured. The plan is for an extensive campus and a group of buildings, embracing central recitation building, science hall, shop buildings for intermediate department, dormitories, and agricultural farm. Judging from the number at present enrolled in the fourth year of secondary courses, 124, there will be fully 100 graduates next year. It is believed that most of these will wish to pursue professional courses, especially medicine, agriculture, and engineering. The University of the Philippines, recently provided for by Act No. 1870, is expected to make provision for this professional and collegiate instruction.

SCHOOL ATHLETICS.

Athletic sports are pursued with great interest in every division. Nearly every high school has a ball team or teams. Twice the schools have been recipients of gifts from Hon. W. Cameron Forbes—baseball outfits and tennis outfits to the school in each province making the greatest progress

in beautifying and improving its grounds. With these sets as models the pupils have themselves manufactured a good deal of their athletic equipment; and the bats are easily turned out in the shops. Military drill is given in at least five provinces. In addition to tennis, the girls in several provinces are playing basket ball. Several provinces have annual field days. In southern Luzon, the Bicol provinces of Camarines, Albay, Sorsogon, and the subprovince of Masbate, hold each year a field meet which has grown into the proportions of a provincial exposition. A number of beautiful trophies have been given for the competitors in this meet. These are as follows: The Trent trophy, for baseball; the Carson trophy, for excellence in English composition; the Bicol declamation trophy; and a trophy for track athletics given by the American Hardware Company. This last year the meet was held at Nueva Caceres. In addition to the scholastic contest and the athletic meet, an agricultural and industrial exposition was held, in which were displayed modern agricultural machinery, a large quantity of which is reported to have been purchased by the farmers of the province, and an extensive exhibit of the industrial work of the schools, and the products and manufactures of the province. The occasion was much more than a school gathering; it was attended, participated in, and aided by officials and citizens of every class.

A baseball league exists among the teams of the cities of Manila and Cavite. Several trophies have been played for by this league—the Osorio prize cup, a set of cups given by Professor Woods, of Groton School, Massachusetts, and finally a beautiful trophy to be played for for seven successive years, given by the boys of the Groton School, Massachusetts.

Medical inspection of children would be desirable in all of the schools of the islands. So far, it has been attempted only in the city of Manila. During the last year a qualified physician—Dr. Anna D. Peck—was employed by the bureau of education and devoted all of her time to this examination. Many cases were recommended by her for treatment at the various hospitals, where it was given gratuitously. Among other cases were nearly 200 of beriberi. "Anemia was very prominent during the first examinations, but after the establishment of kitchens in the various schools there was an astonishingly large decrease. The general physical condition of the pupils was so greatly improved that great credit should accrue to the supervising teachers and others who began the work." Glasses were generously furnished free of charge to a large number of indigent pupils by a Manila optician. A total of 7,319 pupils, 5,459 boys and 1,860 girls, were examined. Defective vision was very prevalent, myopia in 32 per cent of the cases, astigmatism in 47 per cent, and diseased lids (largely trachoma) in 17 per cent; defective hearing existed in 7 per cent; dentist caries in 42 per cent; excessive adenoid tissue (tonsils, pharynx, and nostrils) in 21 per cent; anemia in 10 per cent; 20 per cent were affected with skin disease, and an equal number were pitted from the effects of small-pox. Bodily deformities were rare. The large amount of defective vision, bad teeth, and adenoids recommends the necessity of some provision for giving treatment and remedying these defects. This report takes no account of intestinal parasites or such chronic disorders, or of tubercular conditions.

THE SCHOOLS AND THE ENGLISH LANGUAGE.

All instruction in the public schools covered by this report is given in the English language. From the organization of the schools methods of translation have been avoided, and a knowledge of the language is acquired by its constant use and repetition. The child who enters school entirely ignorant of English will understand ordinary directions of the schoolroom within a very few days;

after that he picks up the language rapidly, and by use of the chart and primer he learns to read, to write, and to speak it at the same time. A child, under favorable conditions of instruction, may learn in the course of the school year to read and write about 250 words, with a conversational acquaintance of nearly as many more. This is considered a good foundation, but it is obviously of small value to the child if he is to stop here. It is observable, however, that second-grade pupils use their English pretty well, are able to carry on a conversation upon limited topics with a stranger, tell him about their town, and give him directions. By the time a child has completed the third grade he has secured a knowledge of the language which will remain with him, and which he will constantly amplify after he leaves school. It is common to meet young men and women engaged in small commercial pursuits who speak very good English and are able to use it for reading and writing, but who no more than completed the third year of some primary school. The aim in the primary course is to give the boy and girl enough English so that they can read an ordinary book or newspaper and gain a reading and writing habit. I think this can be accomplished by the primary course, although results have not yet been fully demonstrated.

The primary school can not, of course, make a finished literary scholar; but if it can give a child a training in letters to the point where he can read and write upon ordinary matters, and profit by the newspapers, keep his accounts, and conduct his own commercial transactions, and be able to appreciate and assimilate to some extent the news of the world, he will be a truly literate man and will not go through the world a mere clod. Children who are only graduates of a primary school will not speak or write wholly correct and grammatical English, but those who make their deficiencies the ground for depreciating their attainments and the work of the schools should recall the undeniable fact that the ordinary American citizen—farmer or mechanic—can not write a letter free from errors of punctuation, capitalization, grammar, and misspelling; yet who is prepared to deny that his schooling is of the utmost importance to him, not only in the exercise of his duties as a citizen, but for the intellectual life which it affords him and for the conduct of his practical affairs? Or, to use another illustration, the English spoken by Filipino boys and girls just out of school is unquestionably better, superior in grammar, vocabulary, and accent to the Spanish that the majority of Americans in these islands are able to speak and write. But poor as American-spoken Spanish is, the immense advantage that it gives to a foreigner in this country is undeniable. The same is true of Filipino-spoken English. The object of the schools, it is granted, must be to impart correct and not corrupt English, to teach the youth to speak it and write it colloquially and freely, and this ideal must never be lost sight of; but meanwhile the tremendous practical advantage of every increased means of communication between the native and foreign elements is too frequently unrealized. Communication of ideas and not of polished phrases is, after all, the object, and when the means of this communication between all peoples in these islands has been fairly well established through the medium of the English tongue, then in great part the present strife and variance will cease and we may look for that better understanding, that increase of mutual consideration and respect, which is so greatly to be desired.

It is impossible to accurately estimate at the present time the number of Filipino people who have a knowledge of English. There are many thousands of children and young people who speak it to the degree above discussed, and these young people are found in every town and in every considerable barrio, so that a stranger entering almost any Filipino community now rarely has difficulty in finding some small person to act as interpreter and adviser. There is

also a large class of young men and young women who speak English surprisingly well, and this includes nearly all of those occupying official or important commercial positions. Of the adult population, including persons of mature years and social influence, the number speaking English is relatively small. This class speaks Spanish, and as it is the most prominent and important class of people in the islands, Spanish continues to be the most important language spoken in political, journalistic, and commercial circles. The class of young people who have been educated in English in the public schools is only beginning to make its way into the active life of the country. Another ten years will tell very greatly in the relative importance of the two languages. Meanwhile, the question is disturbing many minds, "What is to be the ultimate language of this people as they attain a common consciousness and solidarity?" This question has been much discussed within the last two or three years. At the time of the American occupation there was a general feeling among Filipinos that the knowledge of the Spanish language had been deliberately and wrongly withheld from them by the sovereign country. English, as the language of the new sovereign nation, was asked for in part as a political concession. When it was proposed to bring American teachers to the islands to impart this instruction, the number proposed by the general superintendent was 500, but this was raised to 1,000 at the earnest solicitation of Filipinos in order that there might be an American teacher for every important pueblo of the archipelago. Thus, at the very outset of educational work, English was decided upon as the language of instruction as a matter of joint agreement, and if there is dissent now in some quarters from making English the language of instruction there was not then. The spread of the English language has gone steadily on. The results are undoubtedly cumulative. It was more taught and more spoken last year than the year before, and this coming year will see a greater extension of it than last year saw, yet it still has active rivals as the language of use and instruction. It is probable also that there has been some decline of interest on the part of the adult population in the English language. This is attributable to several causes. In the first year of the organization of this bureau the adult population of the towns eagerly sought opportunities to learn English. Night schools were opened in the city of Manila in 1900; later in nearly all the towns of the archipelago. In August, 1904, there were 501 such classes, with an enrollment of over 1,800 people, most of them adult men and women. Owing, however, to the reduction of the appropriation for the bureau of education, it was necessary a few months later, in order to avoid the incurring of a deficit, to close all the night schools in the provincial towns. This was in January, 1905. It was anticipated at the time that it would be possible to reopen them the ensuing school year, but the funds appropriated for the bureau did not permit. Shortly afterwards the date set for English to become the language of the courts was postponed until January 1, 1911. This action, while recommended by the fact that a large number of judges and practicing attorneys were insufficiently trained in English, had a very unfortunate effect upon public confidence in the ultimate adoption of English as the official language of the government. Previously there had been a general expectation that English would be made the official language throughout the administration. By an act passed in the last decades of the Spanish Government the knowledge of Spanish was made a necessary qualification for municipal office. The Filipinos had regarded the adoption of English as the official language of the courts in the light of past experiences and had been exerting themselves accordingly. After the passage of the above legislation such activities largely ceased. Not entirely, however, for in some towns night schools have been conducted and paid for by private subscription, while in Manila night schools supported by the

city have continued, with good results. It seems highly desirable that night classes in the provinces should be reopened. Such classes should be limited to a certain number of weeks during the winter months, when the people have most leisure to apply themselves. They should aim at definite results and follow and complete special courses of work. Authority exists under the law for the director of education to pay for such instruction, though no definite amount of money was furnished by the present appropriation bill. If, however, funds can be spared from some source, this instruction will be resumed during the coming winter.

The extension of the knowledge of English among the adult people is believed to be a matter of the utmost importance and one meriting renewed attention. It is to be noted that with the increased study and use of English there has been an increased study of Spanish. I think it is a fact that many more people in these islands have a knowledge of Spanish now than they did when the American occupation occurred. As already remarked, an immense impetus has been given to private institutions where the instruction is largely in the Spanish language. The general demand upon clerks is for a knowledge of both English and Spanish. Through the great increase in number and circulation of newspapers and periodicals, there is now much more reading of Spanish than formerly. But in spite of these facts it is believed that the use of Spanish here will wane; it is unsupported by Spanish-speaking countries adjacent to us. On the other hand, as has been frequently stated, English is the common language of every port from Japan to Australia and Suez. The chance to make Spanish the language of the islands existed half a century ago, but it is gone to-day. So far as known to me, Spanish is the language of the common people in only 3 communities—Ermita, a district of Manila; Cavite, and its suburb, San Roque; and the Christian colonies of Zamboanga and Cotabato, where a corrupt Spanish dialect called "chabucano" is spoken. The new generation, which will be foremost in the affairs of the islands in another ten years, will not use Spanish for ordinary purposes, and their influence will be decisive. It will cease to be the language of the courts on January 1, 1911. It is rapidly ceasing to be the medium of administrative correspondence. Probably its longest official use will be as the language of the legislature.

THE FUTURE OF THE NATIVE DIALECTS.

How will it be with the native dialects? Their number is generally recognized as a cause of division; their continuance is an obstacle to the attainment of nationality. Few Filipinos, even those who have a scholarly interest in these dialects, advocate the continuance of them all. A common medium of communication is recognized as essential. The present representative government would hardly have been practicable had it not been for the fact that all the members of the Philippine Assembly can communicate in Spanish. The growth of common consciousness in recent years has been possible because a limited number of individuals in every community speak this foreign tongue. There are two supposable ways in which a Philippine language might be produced: First, by selecting one and suppressing all the others; second, by thoroughly fusing all these dialects, retaining the best elements of all.

As regards the first plan, many look to the Tagalog as the ultimate Philippine language. It has the advantage of being spoken in those provinces surrounding the capital. It has, moreover, been most influenced by other tongues. Many years ago it was pronounced by the great German philologist, William von Humboldt, to be the richest and most perfect of all the languages of the Malayo-Polynesian family. It is, however, spoken only by 21 per cent of the Christian

inhabitants of the archipelago. The Visayan, in its several dialects, is spoken by more than twice as many. More than this, the Tagalog, in the capacity of extending his territory and influence, is surpassed by several other peoples. There is not, and there has not been for years past, any considerable expansion of the Tagalog people into new regions. Where they are to-day, they were at the time of the Spanish conquest, with the exception of the towns of southern Nueva Ecija and a part of southern Zambales. But meanwhile the Visayan peoples have had an astonishing growth. In 1735 the entire bishopric of Cebu, embracing the islands of Samar, Leyte, Bohol, Cebu, Panay, and northern Mindanao, yielded only 8,114 tributes, indicative of a population of less than 50,000 souls. At the opening of the nineteenth century they numbered only 100,000. In 1903 they were enumerated at over 3,000,000.^a Their expansion still goes on. They are settling up northern Mindanao, and as the present uninhabited portions of great islands like Palawan invite settlement, it will be the Visayans who colonize them.

On the north are extraordinary emigrants, the Ilocanos. In nearly all the towns of Ilocos there is an annual "swarming." Whole communities move out at once and settle in the rich valleys of the Cagayan and Magat or in the fertile plains of Nueva Ecija, Pangasinan, Tarlac, and Zambales. Here is a people speaking a language very dissimilar from Tagalog, who will dominate northern Luzon, if they do not already do so, down to the provinces of Pampanga and Bulacan. It is impossible to believe that Tagalog ever will or can make progress among the Ilocanos. On the other hand, no Filipino people is more desirous for English instruction than the Ilocano or have better prospects of obtaining general literacy through the public schools. In view of these conditions, I see no chance of Tagalog becoming the language of the archipelago by the natural ascendancy of those who now speak it.

On the other hand, the possibility of making a common language by the systematic and scientific fusing of them all seems even more visionary. Filipino scholars interested in the development of the Tagalog language have adopted a shortsighted policy. In chauvinistic effort at linguistic purity, they are trying to eject from the language all words of foreign origin and to substitute circumlocutions or words of new invention. It may be that they are following the example of the Tagalog classical poet, Baltazar, but this is not the way in which the great languages of the world have grown and spread. Supposing that Englishmen of the time of Henry II had persistently cast out from the Anglo-French speech of their day every word of Norman or Latin origin, and suppose this practice had gone on through the generations since, what would the English language be to-day? English has grown, as every other great language has grown, by adopting and assimilating the words of other languages. The policy adopted by Tagalog scholars for "purifying" and perfecting their own speech spells its ultimate sterilization and death.

Up to the end of Spanish rule the Philippine languages were growing by the absorption of Spanish, and if this process had been assisted by the schools the result would have been striking. I have before me a little compendium of the Visayan language as it is spoken on the island of Masbate, prepared some years ago by a young Filipino scholar. This little volume contains at a rough count 514 words, of which at least 184, or one-third, are Spanish or Spanish corruptions. Of other words are a number borrowed from the Sanskrit, Arabic, and Chinese. The Spanish terms embrace such names as days of the week, months, many foods, occupations, house furnishings, articles of clothing, tools, some domestic animals, some wild animals, many vegetables, nearly all words that

^a See "History of the Population" in Philippine Census, Vol. I, pp. 439-440.

relate to the schools and public buildings, and administration, all names for foreigners, and all proper names. The words of Malayan origin include numerals, parts of the body, pronouns, nearly all birds and fishes, many natural objects, and the verbs and adjectives with very few exceptions. This instance may indicate that the present effort to develop the Philippine languages by casting out the foreign element can only result, as it is already doing, in making them unintelligible to the mass of the people, and in robbing them of essential elements of strength, richness, and utility.

Feeling in favor of the use of the dialects found expression in a proposed law of the last session of the legislature providing for their teaching. This proposed bill, in the form in which it was exhibited at one period of its discussion, provided that instruction in the dialect of any locality might be given in the public schools on request of a local school board and municipal council. The idea of the bill was said to be not to disturb the present curriculum in English, but to put in the dialect teaching where locally demanded as an additional subject. Although many friends of the public schools felt that such a measure as this would weaken their teaching and occasion general misunderstanding, my own feeling is that it would not have done harm and might have introduced instruction of present benefit. It is a very easy matter for a child of the second grade to acquire facility in reading and writing his dialect, as the syllabary used for the purpose is phonetic and very plain. Some reading of proverbs, folk stories, and poetry, of which there is a considerable in several languages, could have followed. But the advocates of the measure inserted a final clause that the municipalities should have the power to decide in what language public instruction should be given. As English was apparently to be included in this scope of their authority, such a power would have afforded possibilities of immeasurable confusion, and if generally exercised for excluding English, would have undone the work of eight years and rendered useless over 6,000 teachers trained to teach English. In this form, therefore, the bill was reactionary and unacceptable and was fortunately disapproved by the upper house of the legislature.

If we may judge by what is taking place in all parts of the globe, the Philippine languages will disappear from use. There is a common belief that these mother tongues do not die, and that instead the dominant intrusive population always ends by adopting the indigenous speech. While this may be true as applied to certain great historical peoples, nothing is more untrue if we survey the world at large at the present day. I have such good authority as the word of W J Magee that in the century just closed the number of spoken languages of the world decreased one-half. Their disappearance is being constantly accelerated. There are scores of languages throughout both Americas which to-day are known only by name. Even in such a continent as Africa so eminent an authority as Sir Harry Johnson states that no native languages will persist except Swahili (itself partly Arabic) and Hausa. Elsewhere the languages of Africa will be English, Arabic, French, Portuguese, and Italian. The multitudinous dialects of the Philippines will likewise disappear. They will leave with us an enormous number of place names, many of which are older than the languages at present spoken in the locality of these names, names of trees and plants, and a considerable additional vocabulary descriptive of objects native to Malaysia. These will all become a part of the English language spoken throughout the archipelago. This result will come even though no more is done than is being done now. It has already proceeded far enough so that it could only be stopped by a complete reversal of policy.

THE DEVELOPMENT OF RACIAL CHARACTER.

I can not hope that this prediction will be welcome to a considerable proportion of thoughtful Filipinos, who are desirous, among other aims, of preserving the best qualities of native character. These gentlemen fear the general adoption of English as likely to result in the loss of the "Filipino soul."

But the triumph of English as the common speech of these islands does not by any means imply the suppression of the native character, or the sacrifice of any of its excellencies. These fears arise from misunderstanding. The educational policy in these islands is not to Americanize or Anglo-Saxonize the Filipino. It is not a policy of "assimilation." Assimilation is fast becoming a discredited policy, though it has been a popular programme with the friends of more than one backward race who have taken for their standard the stature and quality of the white race. French colonial administration has discussed and experimented with the assimilation idea. It was put forward by the Spaniards in the last decade of their rule in the Philippines, and it was then a popular conception with the Filipinos themselves, although it should be noted that Rizal possessed the insight to see all its weakness and to refute it in his second great novel, *El Filibusterismo*. In my own view the policy of assimilation in all dealings of the white race with other races is a profoundly mistaken one. Where accompanied by compulsion is it absolutely indefensible. Not by force but by persuasion is the great work of civilization to be accomplished. Profound differences of character separate the different races of the world, and these can not be broken down by an experience of education. The process of racial differentiation has been a very long one, and while it has left all mankind essentially one it has left the different races of people differently endowed. While no race seems devoid of any human quality or passion, or incapable mentally and spiritually of experiencing the highest emotions, these emotions differ in intensity in different races. Their ensemble is different in one case from what it is in another. The white race has frequently claimed for itself a superior mixture of qualities of every kind, but what is more probable is that other races, even if they do not possess any equally good ensemble, possess at least certain superior qualities in a higher degree. At least every race has some elements of strength and qualities of greatest serviceability, and its highest development does not lie in a slavish conformity to the character of another, but in the wise and persistent cultivation of the best qualities of itself. Our effort here is not to make Filipinos into Americans, but to make better Filipinos. We do not insist that the Filipino qualities of mind and heart shall become those of foreign peoples, but that everything shall be done to cultivate the inherent excellencies of the race in the best possible way. Moreover, there is that assimilation which absorbs one people into the life and character of a stronger race, and that assimilation by which a people possesses itself of new benefits of civilization and utilizes and transforms these in accordance with its own genius. It is by that latter kind of assimilation that progress is made, and there is no question that the Filipino people possesses this power. They form a race which is destined to survive, multiply, and make its influence felt farther than the human mind can forecast. Like other Malayan peoples fortunately situated, this race is rapidly multiplying; it is at least 14 times as numerous as it was when the Spanish conquered the archipelago, and 5 times as numerous as it was at the beginning of the last century. Through all its history it has proved itself capable of rapid cultural advance. It has been continually acquiring and assimilating new elements of civilization. Its indigenous culture, of which certain elements speak with favor, was left behind long ago, when their forefathers progressed beyond barbarism. The primitive Malaysians were forest-dwelling

communities without farm animals, who burned their primitive "cañigins" and planted their simple crops with their hands; they worshipped the spirits of the woods and the ghosts of the departed; they possessed practically none of the arts of civilization, but through successive contact with the civilization of the Hindu, the Arab, and the European, these Malayan peoples have steadily developed in culture until in the Philippines they approximate the civilization of western Europe. The lesson to be learned from this, their own history, is not to turn back to their past for ideal or light, but, confident of their own power and virility, press on in the effort to bring up their life and civilization to the highest standard of the Christian world.

THE TEACHING OF ETHICS.

This discussion of the Filipino character brings us to the subject of moral instruction and character training in the public schools. Little has been done so far by means of direct or didactic teaching. The influence of high-minded teachers, the constant effort to maintain a high standard of conduct of all teachers and pupils, the prompt punishment of common school faults, constantly exert an influence in favor of character training which, while it can not be estimated, can not be doubted. There should be, as well, intelligent and systematic instruction in ethics. Enough has been previously said to indicate my own opinion that this instruction should be built upon a clear and sympathetic understanding of the Filipino character and its own best standards of conduct. Certain admirable virtues are taught by the training given in every home, but it is undeniable that certain essential virtues are neglected in this home training. On this point the school has a responsibility which it has not adequately met, partly because the difficulties in the way are great and partly because intelligence and understanding have been lacking. Obviously moral training can best be given by the Filipino teachers themselves. Some definite requirement as to time and amount within the course of study will have to be made, and then Filipino teachers will have to be prepared by courses in ethics and pedagogy to give this instruction to the children. One of the most necessary qualities to inculcate in the Filipino pupil is the love and habit of self-reliance. The feeling of dependence, the desire for assistance and protection, is inherent in the race. It is a weakness that has been greatly encouraged by a paternal government. It expresses itself in countless ways, but in no way more noticeably than in the fervid seeking for official position and official privilege.

GOVERNMENT SCHOLARSHIPS.

This discouragement of the practice of self-reliance comes close home to the bureau of education, because of the large provision that has been made for student scholarships. These are of several kinds: Government scholarships in the United States, the number afforded by the current appropriation bill being 130; scholarships in the Philippine Medical School, one for each province of the Philippine Islands (Act No. 1632); nurses' scholarships for supporting young women while receiving a training in nursing; municipal scholarships provided by municipalities under the provisions of Act No. 1791; and by Act No. 1857, 100 scholarships for municipal and insular teachers to receive superior instruction in Manila. * * *

Provision for government scholarships in America was made in 1903 by act No. 854, and was for 100 students. Succeeding appropriations increased this provision until the number of students under appointment finally stood at 188.

The standard of scholarship of the early appointees was too low for them to fully benefit by the instruction in American institutions, and in 1907, by resolution of the commission, the examination for appointment was made the equivalent of the completion of a secondary course of study. This higher standard has resulted in very few appointments during the last two years, but there will probably be a number of competitors able to qualify at the end of this school year.^a Of 196 students who have been appointed to these scholarships 2 have died while under appointment, 5 have been obliged to return on account of ill health, 7 have been dismissed for misconduct, 60 others have returned from the United States, their terms of appointment having been completed, and have been appointed to government positions, 40 in the teaching service, 11 to clerical positions, 2 to the position of subinspector in the constabulary, 2 as draftsmen, 1 as a pharmacist, 1 as court interpreter, 1 as agricultural foreman and inoculator, 1 as computer in the bureau of lands, and 1 as private secretary to one of the congressional delegates. The majority of these young men have now been under appointment from eight to ten months. An effort has been made to learn of the quality of their service; 6 are unreported upon, the service of 5 is reported as "poor," 7 as "fair," 22 as "good," and 20 as "superior." There will return to the islands this summer 43 students (4 of them being young women), of whom 11 have taken courses in civil engineering, 3 in mechanical engineering, 1 in chemical engineering, 11 in agriculture, 6 in teaching, 4 in medicine, 2 in domestic science, 1 in architecture, 2 in law, 1 in forestry, and 1 in pharmacy. Under the terms of the law these students may take not more than sixty days of vacation after their arrival in Manila and are then under obligation to accept appointment to a suitable position in the government service and to enter appropriate civil-service examinations to secure eligibility for regular appointment. Not counting those students who are returning this summer, there remain in the United States 76, in addition to whom there are 3 who have resigned their scholarships and are in the employ of the Federal Government; there are also 4 others, recently appointed, who are awaiting transportation to the United States.

In addition to the 10 original scholarships in nurses' training, it is gratifying to report that 4 others were privately provided last year, and 2 other young women took this course at their own expense, a total of 16. For the present academic year provision has been made for 30 government scholarships, and 9 other young women have been provided with scholarships through private generosity. * * *

EDUCATION OF GIRLS AND WOMEN.

The Philippines are fortunate among countries of the East in the position occupied by women. In the social life of the country they have a place as influential and respected as that of the men. The woman's influence in the household, in the direction of household affairs, and in the business interests of the family is preponderant. Filipinos seem to regard the judgment of the women as being cooler and wiser and it is ordinarily adopted. Women are engaged in all sorts of occupations; besides being venders and hucksters, they are shopkeepers and frequently commission merchants on a considerable scale. There are many women of wealth who hold property independently and manage it themselves. This is a condition which gives the Philippines a great advantage over other oriental countries. On the other hand, while the woman's influence is fully equal to that of the man in domestic and practical affairs, they

^a The actual number of appointments for the different school years is as follows: 1903-4, 105; 1904-5, 40; 1905-6, 37; 1906-7, 10, 1907-8, 4; total, 196.

have not enjoyed equal privileges of education until recently. Lately a number of women have taken law courses in private schools of Manila, though I am informed that none has passed the bar examination. There are 3 women students in the Philippine Medical School. Of 6,804 Filipino teachers, insular and municipal, regular and temporary, 2,108 are women. A considerable number of young women fill positions in public offices. The director of civil service states that during the last five years 1,371 young women have entered civil-service examinations in English, of whom 269 passed a teacher's examination and 153 a clerical examination. Since the organization of a modern telephone system in Manila, they have filled the positions of telephone girls, and in the stores of Manila there is commencing to be an increasingly large number engaged as accountants, clerks, and saleswomen. Girls do not, however, attend the public schools or any schools to the same degree as do boys. The disparity between the sexes in the primary schools is 137,974 girls to 221,923 boys. In the intermediate schools the difference is even greater. There were last year 2,898 girls and 10,481 boys in such schools, while in the secondary course, out of 1,324 students only 240 were young women. While there may always be a greater demand for highly trained men than for highly trained women, social improvement in the Philippines depends upon an educated body of women no less than upon a similar body of men.

THE INSULAR SCHOOLS IN THE CITY OF MANILA.

THE PHILIPPINE NORMAL SCHOOL.

Provision for this school was made in the act organizing the bureau of education, and it was first opened in 1901 with a total enrollment of 349 students. In 1902-3 the number of students was 398; and 9 pupils, who had previous instruction in Spanish schools and were somewhat advanced in subject-matter, were given diplomas of graduation, although there was no definite standard of attainment; in 1903-4 the enrollment was 455 students, and of this number 14 were graded as secondary students when the prescribed course of study went into operation. The attendance on this school has steadily risen each year, being 554 in 1904-5; 645 in 1905-6; 733 in 1906-7; and 809 in 1907-8. What is even more gratifying is the higher standard of work attained. In 1906-7 200 of these students were secondary pupils, while in the last school year the number was 286. The secondary courses are very thorough, and the instruction, equipment, and standard are believed to be on a par with that of the best high schools of the United States. Including the early graduates, there have been a total of 99 normal graduates and 4 graduates from a high-school course. Graduates from the normal course are placed by the bureau of civil service on the list of eligibles for appointment as insular teachers without subsequent examination. For the practice teaching, as well as for model and experimental purposes, intermediate, primary, and kindergarten departments are conducted. Those taking the normal-school course have practice teaching in the primary grades in their third year, and in the intermediate grades in their fourth year. The school since its organization has been housed on the "Exposition Grounds" in Ermita in buildings erected by the Spanish Government in 1895 for a Philippine exposition and subsequently used as a school of agriculture. These buildings, while for the most part of a temporary character, have been kept in a state of repair and, with ample and well-shaded grounds, have served the purpose admirably. In a way, this school and its site on the "Exposition Grounds" has been an educational center for the work of the bureau of education. Here have been held the vacation assemblies, and the Philippine

School of Arts and Trades for several years occupied buildings on the same grounds. In connection with the normal school and because no other public school in the city of Manila was affording such instruction, courses in preparation for different professions have been opened from time to time. These include a course in preparation for medicine, that for appointment as magistrate or for entrance to a law school, that for admission to an engineering school, a secondary course in agriculture, another in domestic science, and one in preparation for nursing. In addition to these, a general high-school course has also been conducted. The excellent laboratories in botany, zoology, including anatomy, physiology, and histology, in physics and chemistry, as well as the number of specially qualified teachers at this institution, have been reasons for consolidating here these varied kinds of instruction. At the present time these additional courses are more largely attended than that in teaching. Of 334 secondary students enrolled July 23, 1908, only 60 are taking the course in teaching, 75 are preparing for medicine, 33 for law, 33 for engineering, 18 are taking the agricultural course, 17 domestic science, 41 are preparing for nursing, while 67 are taking the regular secondary course in literature, science, and history.

Other professions are appealing more strongly to students in the school than that of teaching, and the fundamental purpose of the institution as a training center of teachers for the entire archipelago is not being fulfilled. One cause of this may be the fact that graduates of the normal school on entering the teaching service have received a compensation which is not attractive enough in view of their long course of preparation. This entrance salary is ₱600, the same being the maximum entrance salary of a clerk who has passed the second-grade English examination. A pupil who has completed the intermediate course, and has had four years less training than the normal-school graduate, can pass the second-grade examination and receive an equal rate of pay. In justice to the long and superior training taken by graduates of the normal school a higher entrance salary should be paid.

The special training now being given by the normal school will be brought into some sort of relation to the work of the Philippine University, whose establishment is authorized by legislation of the last sessions of the Philippine legislature. It would seem that the work of the university might grow in a natural manner out of the foundations laid by the normal school. Up to the present the normal school has had a history which is believed to be unique in usefulness in the career of educational institutions. By influence, in one way or another, thousands of pupils and teachers have received help and inspiration, and by the thorough instruction given a large number of young people are receiving excellent training. In addition to its other numerous services, the normal school during the last year conducted a department of correspondence teaching. This course was authorized on June 20, 1907, to be given to Filipino teachers who had completed the intermediate course of instruction. There were so recommended 634 teachers, but owing to the inadequate supply of suitable texts, so large a number could not be provided with the facilities for study and only 314 took work in English, while 19 attempted work in algebra. Of the students in the English course, 168 persisted through the year and 114 did work that was satisfactory. This first year was experimental, but it demonstrated the advantage of conducting such correspondence, especially as more and more the regular instruction of Filipino teachers by supervising teachers has to be given up.

THE PHILIPPINE SCHOOL OF ARTS AND TRADES.

Provision for the establishment of this school was made in the act organizing the bureau of education. It was opened in the city of Manila late in 1901. For

two years great difficulty was encountered in securing students, and there was a lack of equipment, no machine tools having been supplied the school. In 1905 some disused stables and wagon barns on the "Exposition Grounds" were fitted up for the use of this school and the first engines and machinery procured. This change, with its equipment, introduced a new spirit into the school, which began to attract a desirable class of young men. A year ago the school moved into better quarters—the old "Arroceros" grounds and shops owned by the city—with an agreement for the use of these premises for five years. The school now has the following departments, all well equipped with excellent machinery and tools: Carpentry, blacksmithing, wheelwrighting, machine shop, wood carving, drafting, and weaving. There were 538 students in attendance last year. Distinctive trade work is given to boys and young men who simply desire to be mechanics. This instruction is given in all the trades mentioned above.

In addition, a general four-year course in manual training is given to students who desire this work as a preparation for some branch of engineering. The course embraces one and a half years of carpentry, one semester of blacksmithing, and two years of machine-shop practice, with mechanical drawing throughout. The school also conducts a normal training department for the preparation of teachers to give instruction in tool work in elementary industrial schools and in intermediate schools. The outlook for the school at present is encouraging, but the present buildings are insufficient and a permanent site and plant must be secured.

THE PHILIPPINE SCHOOL OF COMMERCE.

Until the opening of the present year this school was known as the Manila Business School. It is now an insular school and will offer the secondary course in commerce, a course which later can be introduced, it is hoped, into many of the high schools. The most serious industrial need of the archipelago is capable, trained Filipino men of business. Philippine commerce at present struggles under a severe handicap due to the undeveloped state of three factors—markets, systems of transportation, and the system of credit. The great wholesale establishments of Manila, Iloilo, and Cebu are for the most part in European, American, or Chinese hands. These large companies conduct their own trading and transportation and make loans. Meanwhile there are in every part of the archipelago excellent small business openings not sufficiently large, perhaps, to attract the European, but admirable opportunities for young Filipino men who are willing to commence modestly. Such openings at the present time are taken advantage of only by one class of residents—the Chinese. It is the development of these small businesses in large number that will do most to forward the economic development of the archipelago. To stimulate such an interest, to train young men for these businesses, and to disseminate intelligent information about them is the aim of the secondary course in commerce. It will also undertake to train in public finance a class of young men who may in this manner become qualified to fill positions in the provincial treasury and revenue services. At the present time the work given in the Philippine School of Commerce, while having this large plan in view, is varied and general. There is an attendance of 266 students enrolled in the following courses: Commerce and bookkeeping, 60; stenography, 35; typewriting, 25; telegraphy, 42; intermediate business course, 104. Night classes were opened in the month of July with a present enrollment of 153 pupils.

SCHOOL FOR THE INSTRUCTION OF THE DEAF AND THE BLIND.

One other insular school opened in Manila at the beginning of the present academic year. This is a small school for instruction of the deaf and the blind. A year ago an accomplished and experienced teacher was engaged in the United

States, who the past year has conducted experimental work instructing a small number of deaf children at the normal school. A considerable number of deaf children have been reported from adjacent provinces, but with parents of such small means that no private provision could be made for their attendance upon an institution to give them instruction. Authority was consequently obtained to pay the expenses, not to exceed ₱20 per month, of 20 deaf children, and to open a home for them in the city of Manila. This has now been done, and at the opening there are 11 children in attendance. Provision will be made within a very short time for the instruction of blind children, of which unfortunate class there is in the islands a large number owing to the prevalence of smallpox.

SCHOOLS FOR NONCHRISTIAN PEOPLE.

THE NEGRITOS.

Outside of the Moro Province the pagan peoples may be divided, for the purpose of this report, into three divisions—the Aetas or Negritos or little black aborigines, the uncivilized forest Malayans, and the mountain-dwelling Igorots.

Of the Negritos or Aetas there are probably somewhere between 25,000 and 30,000. They are found on a number of islands, including Luzon, Panay, Negros, Mindanao, and Palawan; but the largest known groups of them are found in the Zambales Mountains, in the forest and hill country of Camarines, and in western and northwestern Panay. There is an unknown number in the Sierra Madre Mountains, which extend for nearly 200 miles along the Pacific coast of Luzon, but nothing is known of them except in 3 localities, at the northern end of this mountain chain, the coast facing Palawi Island, in the mountain country between Ilagan and Palanan, and near the Pacific coast in the jurisdictions of Baler and Infanta. Indeed, the entire Pacific coast of northern Luzon has only 3 or 4 Christian towns, and has been very little explored. There are small groups of Aetas in the Cordillera of Luzon within what is properly Igorot territory. An element that once existed on the island of Mindoro has been absorbed into the Mangyan. There are a few in the mountainous parts of the island of Negros. There is a small group around Lake Mainit, Surigao, who are known as "Mamanua." Occasionally individuals or even family groups are met with elsewhere. Two statements made in regard to these little blacks have been widely repeated: First, that they are rapidly disappearing; second, that they are quite incapable of cultural improvement. Both of these statements I consider to be untrue. While the Negrito has disappeared from many places where he was found in the past, at the present time he appears to be holding his own, and, in defiance of the second assertion, in many communities he is making really notable progress, considering his primitive condition of savagery. When unaffected by outside culture, these little black forest dwellers probably depend upon game and the quest of honey, wild foods and roots; they use the bow and arrow, but not the blow gun or "sumpitan," which is the projectile weapon of the primitive Malayan; their habits are strictly nomadic; at one time they probably never constructed anything except the rudest shelters of branches. But at the present time in many places the Negritos have partially or entirely ceased their nomadic wandering and settled down in well-established small communities. Here they have built houses, or at least permanent huts, and they have learned from the Malayans their method of forest cultivation, and to plant crops of mountain rice, maize, beans, taro, yams, and tobacco. In barter with the Christian population they exchange wax, rattan, and forest products for clothing, iron, salt, and other necessities. In the mountains of Angat,

Bulacan, they do a great deal of lumbering; in the hill communities of Camarines many of them have set out rather extensive fields of abacá. From their Malayan neighbors also they have learned primitive iron working, and in some communities fashion their own knives and arrow points. They almost always have dogs, and in some cases fowls, swine, and even a few carabaos. Now, these are very considerable steps in culture as contrasted with their primitive forest condition, and are sufficient to refute the statement that the Negrito can not any more change his savagery than the leopard his spots.

Schools have been opened for them in 5 localities—in the Bucao River Valley, Zambales; in the Tarlac River Valley, Tarlac; in the mountains back of Florida Blanca, Pampanga; and in the provinces of Camarines and Antique. The plan is to help introduce the culture of the adjacent Christian people and at the same time to give a certain measure of oversight and counsel, and, by opening in the vicinity of each school a trading place, protect them from exploitation which they now suffer. Some reading and writing, knowledge of money and values, calculating and figuring are being taught, and they are anxious to have these matters understood by their young people. It is believed that the Negritos may be persuaded to form more settled communities and to devote themselves more generally to agriculture. What will be the future of these little people it is somewhat hard to say. In the Camarines and in some other places they have to a considerable degree been absorbed into the Bicol population. In other places it seems, however, that they will remain communities distinct in race, although their culture will approximate that of the Christian people. In addition to the pursuit of agricultural life, they will remain the expert foresters that they are now, and with their ability to travel the woods and the mountains they will contribute to the products of the islands those peculiar to the jungle, which is their natural home. * * *

THE IGOROTS.

For the Igorots of the Cordillera of Luzon the problem is a much larger and more important one. Here we have a mountain population of several hundred thousand souls, full of vigor and hardihood. These people are not organized in tribes but in communities or towns, some of them compactly built up and containing several thousand inhabitants. They are among the most remarkable barbarous populations of the world. In physical and mental endowment they seem to be inferior to no people in the archipelago. They have brought their steep and forbidding mountain into a remarkable state of habitableness by the construction of thousands of wonderful terraces and systems of irrigation. They mine gold and copper, and among their beautiful handicrafts are iron-working—spears, axes, and knives of varied form and fine workmanship—cotton weaving and dyeing, copper beating, brass casting, pottery, basketry, and rattan work. During the last decades of its rule the Spanish Government occupied most of this Cordillera with military forces. Cuartels or garrisons were established in many places, and these were connected by trails or mountain horse roads. Missionaries of the Augustinian and Dominican orders established missions in most of these “commandancias;” the Government undertook to vaccinate the people and went so far as to attempt schools. Coffee and cattle raising were introduced.

Following the breakdown of Spanish Government and the retirement of the Spanish troops and missionaries from the Cordillera, most of the results of their work were swept away. The cuartels and missions were in many places destroyed, the roads grew up with the jungle, and when the American Government, five years later, sought to reoccupy these mountains, there was little to

indicate the former presence of the Spanish soldier and missionary. Left to themselves, these head-hunting communities were then engaging in a perfect orgy of feuds. These conditions do not apply to Benguet nor to parts of the province of Lepanto, but almost everywhere else confusion and head-hunting reigned. In 1902 the American Government began the task of organizing governments for the control and benefit of these peoples. The task has been successful, and although Igorot communities still covertly take heads from one another, the best of feeling prevails between the Igorots and the Americans.

Owing to the pacific conditions which prevailed in Benguet while the rest of northern Luzon was either in a condition of insurrection or intercommunity feud, this province was the first region to secure civil government under the American rule. At the same time a considerable force of American teachers was sent there and opened schools in at least 8 of the towns. This was in 1901. American teachers were sent to Lepanto-Bontoc in 1902. Subsequently schools were opened in the former Spanish posts or "comandancias" of Amburayan, Banaue, Quiangan, and Tiagan, and within the last year at Mayoyao, Kalinga, and Apayao. Within recent months the school administration of these two provinces has been united in a single school division known as the "mountain division." It will probably be wise to unite all parts of the Cordillera in a single school division and have all school work for the Igorots conducted under one superintendent and in conformity with a single policy.

Schools for Igorots are of two kinds—industrial boarding schools, to which children come from more or less distant towns, and village schools conducted in the Igorot communities. Of the former schools 5 were conducted during the last year, at Baguio, Benguet, for boys; at Bua, Benguet, for girls; at Alilem, Amburayan; Cervantes, Lepanto; and at Bontoc; a boarding class was conducted for the last few months of the year at Banaue, and in April a boarding school with 32 little girls was started at Bontoc. The plan of these schools is to give the children a comfortable home, food, and clothing, and a training in tool work and agriculture, as well as in academic subjects. Until the last school year there was no adequate provision for buildings for these schools. There have now been constructed a good dormitory and shopbuilding at Baguio; at Bua the girls' school is housed in a building only in part of wood; the school at Cervantes occupies a large recently completed wooden building; at Alilem the buildings are of light materials; and at Bontoc a boarding school building was erected in 1902, but lately had to be torn down owing to faulty construction. Its materials have been utilized in putting up a smaller building which accommodates the school for little girls, and 130,000 bricks have been made under the direction of the supervising teacher for the erection of a new school building. * * *

My own opinion of industrial boarding schools for these people is that while they are apparently necessary in order to train boys from villages where it would not be possible to send a teacher, they are not ideal educational institutions. If carried too far and made too large they are likely to show all the objectionable features of Indian boarding schools in the United States. By removing the boy from his home they educate him in some degree away from his community, which also loses the benefit of the presence of the school. As fast as Igorot boys can be trained as teachers, village schools will be opened. This plan has already been carried out in some degree, utilizing in many cases the services of young Ilocano teachers. Eleven village schools were conducted last year in Benguet; in Amburayan, 5; and in Lepanto and Bontoc 13 more. In Ilocos Norte and Ilocos Sur schools of a similar character were conducted for the Igorot and Tinguian villages in those provinces. The best results obtained in any of these village schools are seen in the supervising district of Cabayan,

the Agno Valley of Benguet Province. Seven of the teachers are young Igorot men. In all of these towns there are school gardens. Basket making is taught at Bocot, pottery making at Daclan, blacksmithing and carpentry at Cabayan. At Cabayan, Declan, and Bocot cloth weaving is taught the girls. Fourteen of the looms were made by the Igorot people and are the property of the girls using them. Five good school buildings have been put up, all of them, with one exception, made of pine lumber, laboriously hewn out by Igorot axmen. These buildings were put up without cost to the government, except for the nails, paint, and glass. In the supervising district of Cayan, Bontoc, by using Igorot skilled craftsmen, instruction was given in iron forging, pottery making, and the casting of brass. Six new village schools have been opened in the district of Bontoc this year. The people have voluntarily built the schoolhouses. The work in Abra merits special mention. Here the Tinguian, while not differing ethnologically from the inhabitants of the higher mountains, stand in plane of culture midway between the Ilocano and Igorot. They are peaceful, well disposed, and prosperous. They have shown themselves extremely eager for schools, and no less than 23 village schools were conducted last year in Abra among the Tinguian, with an attendance of 940 children. * * *

AMERICAN TEACHERS.

By Act No. 74 of the Philippine Commission provision was made for appointment of 1,000 American teachers. There were never, however, this number on duty at any one time, the highest number reached having been 928 in March, 1902. In 1905 the number allowed by law was reduced to 861; in 1906 it was further reduced to 800; in 1907 it was raised to 820; and at the present time it is fixed at 795. Owing to the conditions of the service, a certain number of teachers resign during the course of each school year, and these separations are most numerous at the conclusion of each school year in March, so that the beginning of each school year in June finds this bureau short of a considerable number of teachers. On June 30 last there were in the bureau under regular appointment 722 American teachers, of whom 535 were men and 187 women. Of these, all but 85 have civil-service examination status.

As regards their scholastic attainments, of the total of 722, 253 are college graduates, representing 130 colleges and universities; of these institutions the University of California graduated 12; the University of Michigan, 10; the Universities of Indiana and Chicago, 9 each; the Universities of Kansas and Iowa, 7 each; Harvard, Cornell, and Stanford, 5 each; Yale, Boston, State College of Kentucky, and Nebraska, 4 each; the Universities of Missouri, Ohio, Illinois, Drake, Purdue, Colby, Dartmouth, Georgetown, Lake Forest, St. Charles, Oliver, Asbury, Grove City, and Holy Cross, 3 each. There are 108 teachers who are graduates of normal schools. The educational attainments of the rest of the corps are various; many have completed a part of a college or normal course, and 9 have the degree of bachelor of laws.

Much has been said relative to the instability of the teaching service. The force does change considerably from year to year, but of regular teachers in service June 30 the service of 6 dates from 1900, of 133 from 1901, 35 from 1902, 52 from 1903, 138 from 1904, 56 from 1905, 90 from 1906, 118 from 1907, and 94 from 1908. From this it appears that 364, or about 50 per cent, were appointed previous to 1905, while 139, or 19 per cent, were appointed previous to 1902, and have a period of service in most cases amounting to seven years. This table does not take account of the directors and superintendents, who were appointed to the teaching service as follows: In 1900, 2; in 1901, 34; in

1902, 3; in 1904, 1; total, 40. I think these figures demonstrate a greater stability of the teaching force than is ordinarily supposed. Certainly few branches of the Philippine service can show a directive staff so generally composed of men whose entrance into the service was contemporaneous with the organization of civil government. It is also encouraging to be able to state that there is a growing desire on the part of teachers formerly in the service to return after one or two years of absence in America. These teachers are especially desirable because of their previous experience. There were 28 reinstatements of this sort made during the school year ending June 30, 1908, as against 11 reinstated in the previous year.

During the past year the bureau lost 132 teachers. Of this number 113 resigned, 3 were dismissed for the good of the service, and 16 were transferred to other bureaus of the government; among these, 2 went to the bureau of agriculture, 2 to the bureau of audits, 2 were appointed deputy provincial treasurers, and 1 became chief clerk in a provincial treasurer's office, 1 was appointed treasurer of the non-Christian province of Agusan, 1 was appointed lieutenant-governor of the subprovince of Amburayan, and 1 assistant to the governor of Agusan. * * *

FILIPINO TEACHERS.

A limited number of Filipino teachers are insular teachers, appointed by the director of education as a result of civil-service examination, with temporary insular teachers appointed in the absence of regularly qualified appointees. Municipal teachers are appointed by division superintendents under regulations prescribed by the director of education, and are paid from municipal school funds. The former class was created to render assistance to certain municipalities whose school funds were lacking, and also to make the teaching service more attractive by providing a limited number of positions superior in remuneration and tenure to those of the municipal service. On June 30 there were 282 under regular appointment. The mean salary for these positions is about ₱600 annually; there were 83 drawing less than this figure and 113 drawing more. There were also 339 under temporary insular appointment. Of municipal teachers there were last year 6,211 engaged, of whom 4,212 were men and 1,999 women. Filipino teachers have been segregated into two classes, regular and temporary; the regular are those who have passed an examination prescribed by the superintendent of the division and whose academic attainments in school efficiency are of recognized grade; temporary teachers are those who have not these qualifications and who receive not an annual salary but a monthly wage for the actual time in which they are engaged in giving instruction. The average salary for the entire archipelago is ₱18.39 per month for men and ₱18.70 for women; for temporary teachers, ₱15.54 for men and ₱18.92 for women. In spite of the fact that the qualifications of teachers have risen steadily, this is actually a less average salary than was paid in 1904, when the average salary of men teachers was ₱20.76 and of women teachers ₱20.99. This is a reduction of salary to an amount insufficient to maintain a family, and below the wage of manual labor in many parts of the archipelago. * * *

The fact that on an average and quite generally women teachers receive a little more than men teachers speaks well for the character of their service. It is, however, in large part attributable to the fact that barrio school positions are filled by very young men, students just out of intermediate or high schools, who are induced to begin their service at a low rate of compensation. It would not be possible to secure teachers for the service were it not for the fact that they receive a training and education in general school subjects during their period of teaching, but after this training is secured and the teachers become really

valuable they leave the service that promises so little. The time has come when the salary of municipal teachers will have to be paid on a satisfactory business basis. An average compensation of at least ₱30 per month will be necessary. The attainments of these teachers are steadily rising. When it is considered that the great majority have received their entire academic instruction, as well as their professional training, since the American occupation, it is an important achievement to have produced over 6,000 teachers able to give primary and in some cases intermediate instruction in the English language. These are graded for academic attainments in the same manner as school children, and carry on studies that are primary, intermediate, or secondary. From time to time they are required to pass examinations, as a result of which, and of their regular work, they are advanced in grade. Out of the total of 6,786 reported on (including 575 insular teachers) 5,041 are classified as intermediate teachers. The class of teachers who have not yet completed the primary course is disappearing. While still found in a few provinces, it is probable that during the present year teachers with such slight attainments will be entirely dispensed with or graduated out of the primary studies, with the exception of certain teachers of arts and handicrafts who are engaged, not for their book knowledge, but for their manual skill. Those in the intermediate course were classified last year as follows: Grade V, 1881; Grade VI, 1825; and Grade VII, 1335. There are 709 teachers pursuing secondary studies who are classified: First year, 619; second, 41; third, 38; and fourth year, 11. For the purpose of this examination of their attainments, insular teachers have been included with municipal teachers. These perform services as class-room instructors, as principals of intermediate schools, and as supervising teachers. In the last-named positions executive ability, fidelity to duty, and influence with the people of the community are requisite. How well Filipino teachers are suited by character and present attainments to fulfill this duty is an interesting and important question. As above stated, 70 are either serving as supervising teachers, assistant supervising teachers, or acting supervising teachers. It seems to be pretty thoroughly demonstrated that certain Filipino teachers are able to do this work as well as any man can. * * *

SCHOOL BUILDINGS AND LANDS.

Under the Spanish Government, in pursuance of a plan for public instruction commenced about 1860, a primary school for boys and one for girls was authorized for each pueblo. Buildings in many cases were durably constructed of stone. They usually consisted of one or two large class rooms, with several small rooms for the accommodation of the family of the teacher. They fronted on the town plaza, and their capacity varied from 40 pupils to 200. Many of these buildings were destroyed during the insurrection and many others were occupied for military purposes, so that comparatively few were available when the public schools were reorganized in 1901. Practically all required extensive repairs—new roofs, new floors, and new doors and windows—before they could be reoccupied. In 1904, 534 of these buildings were in use in 374 municipalities; in 1905 the number in use had risen to 726; the present number probably is not in excess of this figure.

The primary school buildings put up under the American Government may be roughly classified into two sorts—those constructed of permanent materials, stone, concrete, or hard wood, with iron roofing, and those built of "light materials," usually a wooden frame, with roofing, sides, and partitions of "nipa" and "swali," the floors being either of wood or bamboo. The construction of buildings of permanent materials has been slow, but 25 or 30 having been erected

in municipalities each year. Of light-material buildings 369 were completed and about 600 more undertaken in 1904. Most of these were in part erected through the distribution of rice purchased with congressional relief funds and turned over to the bureau of education to be expended for schoolhouse construction. A large number of these buildings were destroyed in the disastrous typhoon of 1905, but the construction, commenced through the use of this rice, continued through the voluntary efforts of the people, so that the year 1905 saw a total of 1,697 buildings put up under the American Government, of which 46 were of "strong materials," 269 of "mixed materials," and 1,382 of "light materials." In the same year a campaign was commenced to secure satisfactory high-school grounds and buildings, the matter receiving especial attention in the report of the general superintendent for 1904. This effort resulted in 19 buildings being erected in 1906 for provincial school use and the beginning of the construction of 17 more, and in the erection or reconstruction of 2 buildings for intermediate schools at Indang, Cavite, and Bacolor, Pampanga. At the close of the year 1906, 2,454 primary-school buildings were owned by the municipalities, and of these 298 were constructed during that year. * * *

THE FINANCIAL SUPPORT OF SCHOOLS.

INSULAR APPROPRIATIONS.

Money provided for public instruction is of three sorts, insular, provincial, and municipal. An insular appropriation for the bureau of education pays the expenses of administration and supervision, the salaries of American and Filipino insular teachers, cost of text-books, school equipment, tools and machinery, expenses of schools for the education of non-Christian peoples, for the support of students in the United States, and other expenses. The amount appropriated for the bureau of education for the last fiscal year was ₱3,510,000; to this amount must be added ₱85,951.14, the unexpended cash balance remaining to the credit of the bureau at the close of the preceding fiscal year which was available for the payment of outstanding obligations chargeable to that year, and ₱33,598.42, received during the year from the sale of books and other school supplies, making a total of ₱3,629,449.56 available for expenditure. Expenditures have amounted to ₱3,402,119.59. * * *

The second class of school revenues are funds appropriated or otherwise secured by the provincial governments. These are used mainly for the construction, rental, and care of provincial school buildings. Salaries of instructors in these institutions and school supplies are at present provided by the bureau of education in pursuance of a policy adopted in 1904. During the last fiscal year provincial school funds aggregated ₱377,729.86.

Insular and provincial school revenues are, however, in a fairly satisfactory condition compared with the deplorable inadequacy of municipal school revenues. The Municipal Code (act No. 82), enacted January 31, 1901, provided a municipal school fund for the conduct of primary instruction, to be raised by the collection of a land tax of one-fourth of 1 per cent upon all assessable property. It was further provided that the municipalities might increase this tax to one-half of 1 per cent and that they might, out of their general revenues, contribute by appropriation to school funds.

During the fiscal years of 1902 and 1903 school funds were badly administered, due largely to the demoralization that attended municipal government during these years of pestilence and disorder. In 1903 an arrangement which originated in Bulacan by an understanding between the provincial treasurer and the school superintendent, and gave the superintendent control over municipal school expenditures, was made generally effective throughout the archi-

pelago. Under this arrangement municipal school finances were rapidly organized and put upon a satisfactory basis of expenditure. They have since that time been admirably handled. They have, however, been made very uncertain and subject to shrinkage by changes of legislation. For the fiscal year ended June 30, 1908, the amount of municipal school funds in Christian provinces was ₱1,797,547.67, of which the land tax yielded ₱960,269.65; appropriations made by municipal councils from their general funds, ₱451,438.79; loans from general fund, ₱15,106.58; from 5 per cent of the internal revenue, which first became available that year, ₱114,193.23; and from receipts from all other sources, including balance on hand July 1, 1904, ₱256,539.42. Considering the unsatisfactory condition of school funds in previous years, this was an encouraging showing. It appeared that school revenues might steadily improve and keep pace with growing needs. It is significant that in that year there were voluntary contributions to the value of ₱232,998.32, and that a large number of municipalities voted to increase the one-fourth of 1 per cent to three-eighths or one-half of 1 per cent and to devote the added tax to schools.

A table showing, by years, the number of schools in operation and under the supervision of the bureau of education during the period from 1903 to 1908, inclusive.

School year.	Primary.	Inter- mediate.	Second- ary.	Total.
1903.....	^a 2,000			2,000
1903-4.....	2,233	17	35	2,285
1904-5.....	2,727	102	35	2,864
1905-6.....	^b 3,108	119	36	3,263
1906-7.....	3,435	216	36	3,687
1907-8.....	3,701	193	38	3,932

^a Estimated.

^b Exclusive of Moro Province, 58.

The arts and trades, normal, domestic science, agricultural, and special insular schools are included under the intermediate or secondary heading.

A table showing the number of schools, total annual enrollment, average monthly enrollment, average daily attendance, and percentage of attendance during the school year 1907-8.

Secondary:

Number of schools.....	38
Annual enrollment.....	1,643
Average monthly enrollment.....	1,384
Average monthly attendance.....	1,327
Percentage of attendance.....	96

Intermediate:

Number of schools.....	193
Annual enrollment.....	17,780
Average monthly enrollment.....	14,532
Average monthly attendance.....	13,349
Percentage of attendance.....	91

Primary:

Number of schools.....	3,701
Annual enrollment.....	467,253
Average monthly enrollment.....	323,327
Average monthly attendance.....	256,056
Percentage of attendance.....	79

Grand total:

Number of schools.....	3,932
Annual enrollment.....	486,676
Average monthly enrollment.....	339,243
Average monthly attendance.....	270,732
Percentage of attendance.....	80

CHAPTER VI.

EDUCATION IN PORTO RICO.

The following figures relating to the schools of Porto Rico are taken from an official communication to the United States Commissioner of Education from the assistant commissioner of education of Porto Rico:

Pupils belonging on March 1 in all schools of Porto Rico.

	Third census, 1908.	Fourth census, 1909.
SECONDARY SCHOOLS.		
Normal (not under department).....	150	193
High schools.....	186	326
Total.....	336	519
COMMON SCHOOLS.		
Grade 8.....	434	620
Grade 7.....	638	880
Grade 6.....	942	1,538
Grade 5.....	1,793	2,460
Grade 4.....	2,876	4,020
Grade 3.....	8,019	9,579
Grade 2.....	14,616	18,289
Grade 1.....	33,183	45,265
Total.....	62,501	82,654
INDUSTRIAL SCHOOLS.		
Agricultural school.....	38	(a)
Night schools.....	3,227	3,783
Kindergarten schools.....		280
Total special schools.....	3,265	4,063
Public schools.....	66,102	87,236
Private schools.....	5,409	^b 5,000
Grand total.....	71,511	^b 92,000

^a Instruction suspended during improvement of university farm; school not under department.

^b A minimum estimate.

The following notes are taken from an historical review of education in Porto Rico, entitled "The progress of a decade, 1899-1908," contained in the report of the commissioner of education of the island, Dr. E. G. Dexter, to the governor, dated September 21, 1908:

At the time of the American occupation there were upon the island 380 public schools for boys, 148 for girls, and 1 for adults. In addition to these there were 26 private schools, making a total of 555. In the public schools were enrolled 25,664 children, with an average attendance of 18,243.

The course of study in the elementary public schools consisted of Christian doctrine and elements of sacred history, reading, writing, elements of Spanish grammar, elements of arithmetic, with legal weights and measures and money, the merest elements of geography, and an elementary outline of agriculture, industry, and commerce.

In the superior schools the following subjects were added: Elements of geometry, lineal drawing and surveying, elements of history and geography, especially those of Spain, an elementary outline in physics and natural history adapted in their application to the needs of common life.

On the 30th of October, 1898, there was held in the theater of San Juan, P. R., a mass meeting of citizens, at which the following resolutions were adopted:

"As regards public education, the best means of advancing our people would be kindergartens and normal schools, as established in the United States. Our elementary and superior schools should be transformed and graded according to modern pedagogic methods. Secondary instruction should be a continuation of the primary and a preparation for the superior and collegiate. Universal education should be introduced on the best models of the United States. There should be established schools for adults, Sunday schools, schools of arts and trades, libraries, museums, academies of fine arts, and literary clubs.

"Education must be obligatory and gratuitous, and it must be compulsory on every municipality to sustain its own schools, the number being fixed by law with reference to the population. If the municipality be unable to sustain all the schools, the State should establish the necessary ones.

"Grades of instruction should be three—the fundamental, or that given by the public schools; the secondary, which should give positive notions on scientific, civil, and technical subjects; the professional, which comprehends the knowledge of jurisprudence, medicine, engineering, and technology, the universities to diffuse general knowledge of science for purposes of high culture.

"For the formation of a competent body of teachers it is necessary to establish normal schools for teachers of both sexes, normal schools for professors, normal schools for university teachers, and military and naval schools."

The fact that these resolutions were adopted precisely twelve days after the original military government in Porto Rico seems to indicate not only that there had been a deep-seated interest in educational matters on the part of the Porto Ricans, but also that they did not delay in making a public expression of that interest.

General Brooke, the first military governor, seems not to have found, with his many duties, time to give his attention to the school problem. He was, however, succeeded as military commander on December 6, 1898, by Gen. Guy V. Henry. General Henry not only showed an interest in educational matters in the island, but in a somewhat definite way seems to have had an opinion as to what it was necessary to do. In any event, one paragraph of his address delivered upon assuming command was as follows:

"The system of school education should be looked into, and it is my desire to ascertain how many teachers they (the municipalities) can pay to teach the American or English language, commencing with the younger children. It is believed that those who can speak English only can accomplish the purpose by object lessons. It is thought that American women, for teaching, can be obtained for \$50 a month in gold, and they are well worth it. The young children are anxious to learn, and now is the time for them to do so. If alcaldes will report to me how many teachers they can employ, they will be brought from the United States and sent to these towns."

With what preliminary steps on the part of the military government I am not able to say, but on December 31, 1898, three weeks after the inauguration of General Henry, Gen. John Eaton was appointed by the Secretary of the Interior of the United States as an expert to visit Porto Rico and reorganize the school system. He arrived in January, 1899. It would have been difficult to find a man whose experience better fitted him for the difficult task than General Eaton. He had been superintendent of public instruction for Tennessee; United States Commissioner of Education; a college president; the representative of the United States Government at various international expositions besides having occupied many other posts of great educational importance. In addition, he was an author of no mean repute and had risen to the rank of general in active service in the civil war.

Immediately upon his arrival General Eaton devoted himself to a study of the schools of the island as they had existed under Spanish control, and in the course of two or three months had formulated quite an elaborate school law, which appeared as general orders from the military governor.

In the organization of the government General Eaton was made chief of the bureau of education, which was a subordinate division in the department of the interior, to the directorship of which Hon. Federico Degetau y González had been appointed.

Under General Eaton's charge were not only the educational institutions of the island, but also the charitable institutions, including the asylum for the insane.

As his assistant, practically from the start, General Eaton, had the efficient services of Dr. Victor S. Clark. Doctor Clark is a graduate of the University of Minnesota; had taken postgraduate studies at the University of Chicago, Göttingen and Berne, Switzerland, receiving his doctorate of philosophy at Columbia in the year 1900. He was a man eminently fitted for the work which he had to perform, and much of the success of the early educational movement upon the island seems to be due to him.

Upon May 1, 1899, the code of school laws prepared by General Eaton, presumably with the aid of Doctor Clark, was issued as a general order by General Henry.

The code provided, first, for a local school organization of 5 members in any barrio or township of the island, and defined fully the duties of such officers. General plans were also given for taxation and bonding of the school districts thus constituted. This part of the code seems to have failed largely, since organization was merely permissive and not mandatory. Orders were, however, issued six months later which obviated this defect.

The second part of the code dealt with the details of public instruction and did not go into effect until July 1, 1899, or after the completion of the school year in progress at the date of their issue. As outlined by Doctor Clark in his first educational report,^a the specific orders were as follows:

Order No. 1 abolished the fee system and made the public schools entirely free to pupils of all classes and degrees.

Order No. 2 limited the school year to nine months of twenty days each.

Order No. 3 established a system of graded schools in the towns where schools had heretofore been ungraded; limited the number of pupils which any single teacher might receive to 50; and required that there should be a principal in every school employing more than 4 teachers.

^a Senate Document No. 363, Fifty-sixth Congress, first session.

This order further required that wherever practicable the different grades of a school should be located in the same building, and determined the minimum floor area of $1\frac{1}{2}$ square meters for each pupil.

Order No. 4 outlined the course of study. Church doctrine and religion were dropped; the required subjects were to be Spanish, English, arithmetic, and geography, with the elements of United States history and civil government, while the minor subjects of music, drawing, manual training, hygiene, and morals were provided for wherever teachers were competent to give instruction in these branches.

Order No. 5 established the legal qualifications for teachers.

Order No. 6 fixed the salaries of public school teachers at \$75 per month for principals, \$40 and \$50 per month for graded teachers, and \$30 per month for rural teachers.

Order No. 7 made provision for free text-books.

Order No. 8 defined the relation of municipalities to public schools, and required the local school board to provide buildings, supplies, such as paper, ink, and chalk, school furniture, and residences for teachers.

Order No. 9 gave municipalities full authority to elect properly qualified teachers for their local schools.

Orders Nos. 10, 11, and 12 provided for the establishment of high schools, normal schools, and such professional schools as might be necessary in the island.

On July 8, 1899, a general order was issued by the military governor, establishing the first board of education under the American Government.

Less than a month later, August 12, 1899, the bureau of education was formally discontinued, the insular board taking its place.

The board so constituted functioned as the highest educational authority on the island up to the beginning of civil government, May 1, 1900. On that date the Foraker Act went into effect, and since one of its provisions was the appointment by the President of a commissioner of education, the insular board ceased to exist.

Dr. M. G. Brumbaugh was the first presidential appointee to the position of commissioner. He did not arrive upon the island until August 4, 1900. During the intervening three months Dr. George G. Groff, the president of the insular board of education, acted as commissioner. Doctor Brumbaugh was one of the best-known educators in the United States, and did work upon the island which is very fresh in the memory of Porto Ricans as a class, by whom he was much beloved. A graduate of Juniata College, Huntington, Pa., he did post-graduate work at Harvard and at the University of Pennsylvania, being the recipient of the master's degree and of the doctorate of philosophy and of the doctorate of laws. At the time of his appointment to Porto Rico he was professor of pedagogy in the University of Pennsylvania. He has published a considerable number of public school text-books, and many articles of pedagogical nature in magazines.

The school law promulgated by General Henry was in operation. At the first session of the Porto Rican legislature, however, he succeeded in passing what has been since that time the fundamental school law of the island. Although it has been amended in many particulars, some of them important, at each session of the legislature since, still much of the original law is in force.

In January, 1901, in answer to application made to the President of the United States, the sum of \$200,000 was transmitted by the Federal Government to the treasurer of Porto Rico to be used for school extension in Porto Rico. Plans were immediately formulated for the proper use of this fund and 18

school buildings were projected. These in each case were given to such municipalities as would donate at least an acre of suitable land.

The legislature having appropriated a sum for the purpose, all school books and supplies were now furnished by the department of education, greatly improving conditions formerly existing, when many of the children were not supplied with the necessary books and material.

During the spring of 1901 teachers' institutes were organized, lectures being given by Hon. O. T. Corson, ex-school commissioner for the State of Ohio, and the Hon. Henry Houck, for many years deputy superintendent of public instruction for the State of Pennsylvania. These institutes were a great success.

On February 8, 1902, Doctor Brumbaugh resigned the office of commissioner and Dr. Samuel McCune Lindsay was appointed by the President to take his place.

Doctor Lindsay was a well-known educator, sociologist, and author. He is a graduate of the University of Pennsylvania, having taken postgraduate courses at the universities of Pennsylvania, Halle, Berlin, Vienna, Rome, and Paris, receiving his doctorate of philosophy at the University of Halle. Doctor Lindsay was for some time secretary of the National Child Labor Association in New York and is at present professor of social legislation at Columbia University.

Upon Doctor Lindsay's arrival in February he found already established, in addition to the system of graded schools and the high school at San Juan, a normal school at Rio Piedras for the training of teachers. The building for this school was then in process of construction, having been transferred from Fajardo to Rio Piedras by Doctor Brumbaugh, and was dedicated May 30, 1902. This building had been erected at a cost, including the ground, of \$35,000, and is situated about 7 miles from San Juan. Twenty-one frame rural and agricultural schools had also been completed. In addition to the above there had been completed 14 brick buildings for graded schools, all of them substantial structures, the plans and specifications being prepared in the department of education. There were also in process of construction 3 more graded school buildings, the total cost of the 17 graded-school buildings being about \$140,000 exclusive of the land donated by the municipalities.

In response to an appeal from Doctor Lindsay the trustees of the fund allotted by the President of the United States consented to the use of the further sum of \$150,000 for school buildings. This sum was immediately allotted for the erection of a graded-school building, a frame building for the residence of the principal of the normal school, and for the erection of rural and agricultural schools.

A new plan was instituted for the construction of the graded-school buildings, whereby the municipalities were required to pay one-half the cost of the buildings in addition to providing the land. In order to facilitate the operation of this plan, a bill was passed giving the municipalities the right to levy a special school tax, not exceeding one-tenth of 1 per cent, on all personal and real property, in addition to the regular property tax, to be collected by the treasurer of Porto Rico and turned over directly to the school board to be used exclusively for school purposes. At the same time another law was passed raising the minimum per cent of all taxes which the municipalities were required to turn over to school boards for school purposes from 10 to 15 per cent.

During this fiscal year over \$38,000 were expended for text-books and supplies, and the further sum of \$29,000 for school furniture.

There being about 100 pupils who had completed eighth-grade work, provision was made for these in the high school at San Juan, and in addition the first

year of the high-school course was opened in Ponce, two parallel high-school courses being provided, one given in Spanish, the other in English.

The legislature at its session of 1902 passed a bill providing for the establishment of industrial schools in the cities of San Juan, Ponce, and Mayaguez, the sum of \$40,521 being made available for the maintenance of these schools.

In addition to the rural, agricultural, graded, and high schools, there were in operation a number of special schools, including night schools, with special instruction in typewriting and stenography in addition to arithmetic, reading, writing, etc. The experimental kindergartens had also done good work and had aroused much enthusiasm among the parents. The legislature also provided for the establishment of 3 schools for the training of nurses under the direction of an American trained nurse graduated from one of the best schools in Boston.

The legislature during its session of 1901 passed a law providing for the establishment of scholarships in the United States, as follows: Twenty-five scholarships in colleges and universities of the United States, each beneficiary to receive \$400 per annum during four years; and 20 scholarships in industrial and manual-training schools in the States, each beneficiary to receive \$250 per annum for a term of four years. The former scholarships were open to young men only, the latter to both sexes. During the year 1902, 45 students were enjoying the benefits of these scholarships in the States.

The insular normal-school building was dedicated on May 30, 1902, with an attendance of over 125 pupils, and funds were allotted for the addition of a practice-school building.

During the session of the legislature in 1903, in addition to the law providing for the compiled school law, two important bills were passed, one providing for the establishment of the University of Porto Rico and the other creating 28 scholarships in the normal school, open to both sexes. The law providing for the establishment of the university provided also that the government of the university should be vested in a board of trustees appointed by the governor of Porto Rico. The law provided that the university should consist of several departments, first in order being the normal department, to be known as the insular normal school, and to be dedicated to the training of teachers.

During the summer of 1904 the department of education organized an eight weeks' trip to the States for Porto Rican teachers for the purpose of study at the summer schools of Harvard and Cornell universities. Five hundred and four teachers of Porto Rico went to these universities and received instruction during the summer. The department commenced its preparations for the proper carrying out of this excursion in the summer of 1903, and secured, first, an act of Congress authorizing the use of army transports.

After the securing of transportation it became necessary to devise some plan whereby the necessary funds for the expenses of the expedition could be secured. It was estimated that the cost per capita, including meals on transports, board, lodging, tuition at the summer school, and one week's travel, enabling the teachers to see the cities of Boston, New York, Philadelphia, and Washington, would be \$100. It was decided to ask the teachers themselves to contribute one month's salary. This they did, promptly and cheerfully, and their total contributions amounted to \$21,175.57. Over \$20,000 in addition were contributed by the people of Boston, New York, and Philadelphia, half of this amount coming from Boston, due in a great measure to the interest and indorsement of President Eliot, of Harvard.

This excursion was a great success, and the teachers returned to Porto Rico on the 22d of August, delighted with their stay in the States and the experience acquired.

In September, 1904, Doctor Lindsay resigned the commissionership, and Dr. Roland P. Falkner was appointed by the President in place of Doctor Lindsay.

Doctor Falkner was a graduate of the University of Pennsylvania, having received the degree of Ph. B. He studied economics at Berlin, Leipzig, and Halle-on-Saale, Germany, being the recipient of the degree of Ph. D. at Halle. At the time of his appointment to the office of commissioner of education Doctor Falkner was Chief of the Division of Documents, Library of Congress, Washington, D. C.

During the year 1904-5 three high schools were in operation in the island, at San Juan, Ponce, and Mayaguez, with an average attendance in the high-school department of 106 pupils as compared with 78 the previous year. Industrial schools were also maintained in the cities of San Juan, Ponce, Mayaguez, and Arecibo under direct appropriation of the legislature, and under the general fund at the disposal of the department of education for the maintenance and establishment of industrial schools a school was also established at Guayama.

Of the agricultural schools, 11 were conducted with an attendance of 506 pupils, as compared with 466 the year before, and 37 night schools were maintained, with an enrollment of 768.

Teachers' institutes were conducted during 1904-5, the same plan being followed as in former years.

In January, 1905, a revised course of study for the rural schools was issued, the department having under consideration during the summer of 1905 a new course of study for graded schools.

During the summer of 1905 special classes in English were held in the school districts of the island. These classes continued during a period of five weeks, with an enrollment of over 500 Porto Rican teachers. In order to assist the American teachers to acquire a working knowledge of the Spanish language, a course of study was suggested, and text-books for learning Spanish were supplied by the department to all who applied for them. Examinations in elementary and advanced Spanish were held by the department and certificates issued to those who successfully passed these examinations.

During the school year 1905-6 the department of education employed 158 American teachers, 127 serving as teachers of English.

Industrial schools were originally established in San Juan, Ponce, and Mayaguez, and later other schools were opened in Guayama and Arecibo. Opposition to these schools had been growing since the time of their establishment, and in the legislative session of 1905 a strong effort was made to overthrow them. A compromise was, however, effected by which the schools of San Juan, Ponce, and Mayaguez were maintained, but those of Guayama and Arecibo abandoned. In the year 1905-6 the position of supervising principal of industrial schools was abolished, and grading in academic work was made entirely different from grading in the shopwork. Notwithstanding these and other changes, it appeared that public opinion was opposed to the work of these schools, and in the legislature of 1906 appropriations for these schools were stricken out of the budget by the house of delegates and a law passed abolishing the industrial schools as constituted, but merging their material and equipment with one of the boys' and girls' charity schools into a new organization to be known as a "School of arts and trades." This bill, however, did not reach the executive council until too late, and was therefore not considered.

The legislature of 1907 also established 50 scholarships in the high schools of the island, to be assigned to the most promising graduates of the eighth grade

throughout the island. The appropriation for salaries of the common schools was increased to \$500,000, and by a special act a large and adequate piece of public land was donated to the school board of San Juan for the erection of a school building. Perhaps the most important act of the legislature of 1907 was the establishment of a school-building fund. The law provides that school boards who apply for assistance from the fund shall furnish the necessary sites and agree to repay, in a period not exceeding ten years, one-half the cost of erecting the buildings.

Teachers' institutes were held under the supervision of the department in all the districts of the island, and in the budget of 1907 an appropriation was secured for the maintenance of summer schools.

These were in charge of an American teacher as director, assisted by one or more Porto Rican teachers. In all these instruction in English was the common feature.

COURSE OF STUDY.

In consonance with the demands of progress several revisions of the course of study have become necessary during the decade. The first was made eight years ago by Commissioner Martin G. Brumbaugh, when the insular board of education turned over the school system established under the military government. The course which he presented in his report for the year 1900-1901 was based upon the best and most fruitful experience in American schools, and by its form of presentation emphasized those elements most necessary to a well-balanced training.

In the report for 1906 Commissioner Falkner said: "The course of study for the graded schools of the island was prepared some years ago, and was based largely upon the experience of American schools. Local needs had not then been sufficiently felt to exercise much influence in shaping the course. To-day these needs are better, if not wholly, understood. * * * The old course was based upon the supposition that the instruction was to be given in Spanish, with the teaching of English as a special subject only. It has already been noted how this condition is gradually passing away, and it can readily be inferred that the former course of study was thereby rendered useless."

In mentioning the course of study prepared for that year Doctor Falkner emphasized the following points: "The work to be covered in the eight grades is the same, whatever the language employed in the school, but it will be differently distributed, according as English or Spanish is the predominant medium of instruction. As in our several districts we have all possible combinations in this respect, the preparation of a new course of study immediately applicable everywhere was out of the question. Accordingly it was assumed that instruction in the first grade should be given in Spanish, and from the second grade upward in English."

The principal changes effected are such as to provide for more instruction in the use of English.

During the coming year (1908-9) all tests and examinations on English suggested by the department will be based upon the language books. Meanwhile the course in reading is being strengthened, and in Ponce, where for the first time the first-grade work is to be done wholly in English, a test of new methods in the teaching of reading will be inaugurated. It is the intention that in the reading, as well as in the language work, interest shall be stimulated by putting a book hitherto unknown to him into the hands of each pupil upon his advancement to a higher grade.

SECONDARY EDUCATION.

While the record of the development of primary education is a most interesting chapter in the history of the past decade in Porto Rico, no less significant is the story of the establishment and quiet growth of secondary instruction.

Upon the disappearance of those institutions which afforded opportunity for higher education prior to the inauguration of the American system of public schools, the necessity for replacing them with schools more in keeping with the new order of things became at once imperative. Perforce, the first attempt at meeting the need was tentative; for the problems peculiar to this phase of the task to which the educational authorities had set themselves were quite different in certain essentials from such as had been met and answered in the establishment of similar institutions in the United States. In other words, those in charge of public instruction in Porto Rico were without adequate precedents. Among the difficulties, there was the question of language—whether instruction should be given in Spanish or in English; there was also a lack of an efficient corps of teachers for the work of the primary grades; and, finally, there existed a certain obligation to furnish instruction in pharmacy to a body of students whose training had been interrupted by the disappearance of the schools first mentioned.

A summer school established in San Juan, July, 1899, with an enrollment of 76, of which number a majority were teachers taking a normal course, marks the beginning of the new secondary education. At the opening of the school year of 1899–1900, the school was continued in the same edifice, the diputacion building, under the name of the “normal and training school.” The enrollment increased to 238, of this number 49 being enrolled in the high-school department. At the same time a high school with an enrollment of 50 was established in the city of Ponce. In January, 1900, the school in San Juan was moved to a new frame building erected by the military authorities near Fort San Cristobal. This structure was destroyed by fire one week after the close of the school year. A fact worth recording at this point is this, that instruction in the high schools during this period was wholly in English.

The experience of the first year called for modifications in the original plan. It was seen that to proceed on an English basis alone was premature, and would continue to be impracticable until pupils were prepared to enter upon their secondary education with a thorough working knowledge of the English language. Owing to the large number of pupils in San Juan who were unable to pursue their studies in English, it was decided to establish a Spanish high school and an English high school, joining the graded department to the latter. So, at the beginning of the school year 1900–1901, the normal and training school was discontinued, and its high-school department was reorganized under the name of the “high and graded school.” In Ponce the same plan was adopted, but it did not go into effect until the year 1902–3, when a class of 15 pupils were admitted from the graded department to the work of the ninth grade. With the close of the year 1904 the Spanish high school disappeared in San Juan, so that both San Juan and Ponce began the next year with high and graded schools in which the instruction was given in English.

Such changes as have occurred since 1905 have been made largely on account of the more general use of English throughout the whole system of schools. The number of Porto Ricans able to conduct classes in English had increased to such proportions by 1905–6 that it was decided to employ as many of them as should successfully pass a test prepared for the purpose to teach grades in

English. Enough were found to take charge of nearly all of the first, second, third, and fourth grades in the schools of Ponce and San Juan. It was therefore decided to retain only the fifth, sixth, seventh, and eighth grades with the high schools. Thus, in 1905-6 the secondary institutions came to be known popularly as the "high and grammar schools," under which name they continued up to the end of the decade.

A high school was established in Mayaguez in 1903-4, from which two classes have already graduated. At Fajardo, where it was expected that a high school could be developed, the conditions have not been favorable to its organization:

UNIVERSITY OF PORTO RICO.

The University of Porto Rico was established by an act of the insular legislature approved March 12, 1903, as an organization for the gradual development of facilities for higher education in Porto Rico. This law vested the government of the new institution in a corporation known as the board of trustees of the University of Porto Rico, of which the governor of Porto Rico is honorary president and the commissioner of education is president *ex officio*. It provided the board with an income from the insular revenues and authorized the solicitation of federal and private aid. It established a normal department by transferring the insular normal school with its grounds, buildings, equipment, and current appropriation from the department of education to the board of trustees of the university. It provided the basis of an agricultural and mechanical department by transferring to the board of trustees a farm of 100 acres in Rio Piedras, previously purchased by the commissioner of education at a cost of \$9,700 out of the general school extension fund—a fund constituted from customs on Porto Rican importations collected before 1901 and refunded by the Federal Government on the institution of free trade. And it authorized the organization of the following additional departments, in the order given, as soon as the necessary funds should be available: A department of the natural sciences and engineering, a department of liberal arts, a department of medicine, a department of laws, a department of pharmacy, a department of architecture, and a university hospital.

The normal department was organized on July 1, 1903. A department of agriculture was established in October, 1904. Plans for the opening of a mechanical department during the coming school year, to be attached either to the normal department or the agricultural department, are now under consideration. Appropriation was made by the legislature of 1908 for a new college of agriculture and mechanic arts, the erection of which will be begun this autumn. No other departments have been actually attempted. The hope of the founders that private donations would be forthcoming has never been realized, and their hope of federal aid was not realized until May, 1908, when an allotment under the Morrill Act was received; and the income accruing from insular revenues has not been great enough to permit further extension.

NORMAL DEPARTMENT.

The normal department is situated on a tract of 23 acres lying along the military road at a distance of 7 miles from the capital. Its three buildings, the normal school, the practice school, and the principal's dwelling, are valued at \$33,500, and its other property as follows: Land, \$6,500; apparatus, \$800; library, \$1,655; other equipment, \$2,800.

This department offers to graduates of the eighth grade of the public schools a two-year and a four-year course in normal training. At the end of the two

years pupils receive an elementary certificate. This entitles them to a graded license which enables them to teach in the graded schools if they have attained the legal age of 19. If not they receive a rural license subsequently changed for a graded license when the legal age has been attained. On the completion of the four-year course a diploma is given which entitles the holder, after one year's teaching in the public schools and on reaching the age of 21 years, to a principal's license. The department offers to graduates of high schools a one-year course also leading to the diploma. A table is here submitted showing the number of pupils enrolled, pupils graduated, and teachers employed in each of the years since the school became a part of the university, and another, taken from the school census made on February 28, 1908, showing the ages of the pupils enrolled at that time.

Enrollment, graduates, and teachers employed, 1903 to 1908.

Year.	Number of different pupils enrolled.					Number of graduates.				Number of teachers.	
	Fourth year.	Third year.	Second year.	First year.	Total.	Special course for rural teachers.	4-year course.	3-year course.	2-year course.	Normal school.	Practice school.
1903-4.....	-----	13	29	60	102	71	-----	7	13	10	7
1904-5.....	5	21	48	34	108	-----	4	-----	23	10	7
1905-6.....	13	26	30	62	131	-----	11	-----	33	8	7
1906-7.....	12	8	46	68	134	-----	13	-----	27	8	7
1907-8.....	8	14	69	68	159	-----	8	-----	61	8	7

Ages of pupils, as shown by school census of February 28, 1908.

Age.	First year.	Second year.	Third year.	Fourth year.	Total.
14 years.....	3	-----	-----	-----	3
15 years.....	6	1	-----	-----	7
16 years.....	11	3	1	-----	15
17 years.....	22	16	5	1	44
18 years.....	9	23	2	3	37
Over 18 years.....	14	21	5	4	44
	65	64	13	8	150

The following is the course of study approved for 1908-9:

ELEMENTARY COURSE LEADING TO ELEMENTARY NORMAL CERTIFICATE.

First year.—First semester: English, history, physiology, arithmetic, music. Second semester: English, civil government, geography, Spanish grammar, nature study or elementary agriculture.

Second year.—First semester: English, theory of teaching, Spanish composition, algebra, drawing. Second semester: English, practice teaching, school management, special methods, drawing.

ADVANCED COURSE LEADING TO DIPLOMA.

Third year.—First semester: English, general history, geometry, zoology. Second semester: English, general history, algebra, botany.

Manual training or domestic science throughout the year on alternate days.

Fourth year.—First semester: English, psychology, physics, practice teaching. Second semester: English, Spanish literature, chemistry or physics, domestic science.

ONE-YEAR COURSE FOR HIGH SCHOOL GRADUATES LEADING TO DIPLOMA.

First semester.—Theory of teaching, psychology, music, drawing, nature study or elementary agriculture.

Second semester.—Practice teaching, school management, special methods, manual training or domestic science.

The courses in elementary agriculture, manual training, and domestic science appear in the curriculum for the first time. All subjects, with one or two exceptions in the scientific branches, are taught in English, signal progress in the introduction of this language having marked the normal school since its inception.

The normal department of the university, though administered separately, forms an integral and a most important part of the public-school system, and already the graduates of the normal school are exerting a most helpful influence in insular education. This fact is recognized by the legislature in the requirement that tuition shall be free and in the regular maintenance of scholarships for needy students. Since 1903, 38 scholarships have been maintained at an annual cost of \$5,460, and beginning with 1908-9, 75 scholarships will be maintained, at a cost of \$15,000 annually. These scholarships are awarded with careful regard to equal geographical distribution and the major part of them are always available for students of the first and second year classes.

AGRICULTURAL DEPARTMENT.

The agricultural department was organized in October, 1904, on the farm of 100 acres located in Rio Piedras and adjoining the normal-school property, which was transferred to the board of trustees in the act establishing the university. The farm was then in a state of abandonment, overgrown with brush, and in need of draining, fencing, and roads. It had but one building, an uncompleted farmhouse, and of its 100 acres not more than 4 were under cultivation. On June 30, 1908, the property of this department was valued as follows: Land, \$12,555; buildings, \$8,500; apparatus, \$400; live stock, \$1,125; other equipment, \$700; roads, ditches, and fencing, \$725; standing crops, \$3,934.45. Twenty acres were under cultivation in pineapples, oranges, cocoanut palms, small fruits, and grasses.

The first class of students was enrolled in February, 1905. At the beginning the farmhouse was used, under great difficulties, for schoolroom, dining hall, and dormitory, and the teaching force consisted of the director and the matron, the faculty of the normal school furnishing all instruction in the academic branches. Later a school and dormitory were erected, and the number of teachers was increased to 5. The number of pupils enrolled, graduates, and teachers employed in 1907-8 was as follows: Enrolled, 39; graduates, 8; teachers, 5.

The following is the course of study adopted, requiring three years' residence and leading to a certificate in elementary agriculture:

First year.—Agriculture, mathematics, English, Spanish.

Second year.—Agriculture, mathematics, English, physiology.

Third year.—Agriculture, horticulture, animal husbandry, farm bookkeeping.

A review of the expenditures for school purposes for the ten years ending June 30, 1908, shows that a total of \$7,423,225.97 has been disbursed by or under authority of the department of education.

CHAPTER VII.

EDUCATIONAL PROGRESS IN THE ARGENTINE REPUBLIC AND CHILE.

By L. S. ROWE, Ph. D., LL. D.,

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The great work of educational regeneration undertaken by the United States Government in Cuba, Porto Rico, and the Philippine Islands has aroused widespread interest in all matters relating to the countries of Spanish civilization. This newly awakened interest comes at a most propitious time, for it is coincident with a clearly defined movement throughout South America to profit by the experience of the United States in educational matters.

Heretofore the South American countries have accepted European educational methods without question. In fact their intellectual stimulus has proceeded almost exclusively from European sources. In Brazil, in the Argentine Republic, and in Peru, French influence has been dominant; in Chile, German methods have been followed, especially in the organization of secondary education.

Acquaintance with educational aspirations and educational progress in South America is a matter of far more than passing interest to teachers in the United States. In the course of two prolonged tours through South America during the past three years not only were innumerable requests for material and data relating to American educational methods received, but also constant inquiries for competent men and women to take charge of educational institutions.

Although it was comparatively easy to furnish all the data requested, the problem of supplying candidates for the available positions has presented great difficulties. These difficulties have been due in part to the uncertainty of tenure in some of the countries, and in others to the lack of preparation of American teachers for the posts in question. Fortunately the uncertainty of tenure is rapidly disappearing, for most contracts now read for a minimum period of five years, and what is more important, their provisions are carefully observed.

The inadequate preparation of American teachers for service in Latin-American countries and their lack of adaptability constitute

the most serious obstacles to the efficient performance of a service which practically all these countries are now asking of us.

Owing to their greater adaptability the Germans have been able to supply competent teachers wherever and whenever the opportunity has presented itself. The ease with which they acquire foreign languages, together with their quick appreciation of the point of view of the country in which they settle, gives to the Germans a position of marked influence in educational affairs. Thus in Chile, German ideas have dominated the system of secondary education. The faculty of the pedagogical institute, from which all high-school teachers are graduated, is composed almost exclusively of Germans.

It is likely that the teachers returning from the Philippine Islands and Porto Rico will furnish a considerable contingent of available candidates for positions in Latin America, but there still remains the serious defect of the lack of adaptability of the average American. At bottom, this lack of adaptability is due to a certain provincialism of the American mind. Much of this can be remedied by giving to the study of Spanish and Spanish-American history and institutions a more important place in our normal schools; at least making these studies elective for those who may be looking forward to foreign service.

The small group of American normal-school teachers brought by President Sarmiento to the Argentine Republic furnishes a most striking instance of the possible influence of a corps of carefully selected teachers. Although the immediate activities of these teachers were confined to the city of Parana, their influence has extended throughout the Republic. At the Parana Normal School were trained the educators who have reorganized educational methods in the Argentine Republic, introducing modern pedagogical standards. To-day the names of this small group of American teachers are revered throughout the country.

Fortunately, the desire of the people of South America to profit by the experience of the United States comes at a time of awakened and increasing interest in Latin-American affairs in the United States. Independent of the possibility of sending American teachers to assume charge of South American institutions, our educational experience can not help but be of great value to our neighbors. This service consists not so much in a bodily transplanting of the American educational system as in impressing upon educators throughout Latin America the necessity of greater elasticity of curricula and of closer adaptation of educational methods to local needs and local conditions. The increasing complexity of our primary and secondary curricula, together with the tendency to introduce with each year new subjects of instruction, has resulted in many cases in an overloading of the course of study. In spite of the danger, however, our system

has maintained an elasticity of form and an adaptability in application to local needs quite unknown to most of the South American countries.

The most serious defect of educational organization in the Argentine Republic, Brazil, Chile, and Peru is this tendency to impose the same course of study on every boy and girl, quite irrespective of their tastes or subsequent vocation. From the primary school to the close of the high-school course not the slightest freedom of choice is permitted. It is true that in all of these countries there exist industrial and commercial schools, but up to the present time these schools have occupied a subordinate and inferior position, the sons of the wealthier families avoiding them because of a well-defined social prejudice against this type of education.

The result is that in Brazil, the Argentine Republic, and Peru, and to a certain extent in Chile,^a the great mass of boys and girls who advance beyond the primary grades are required to follow a course of study patterned in large measure after French models and intended to prepare for the liberal professions, especially law and medicine. Even from this point of view the course of study is open to much criticism, largely because of its rigidity and complexity, but its most serious defect is that it encourages a great number of young men, best fitted for commercial or industrial life, to enter callings for which they have no real capacity. It is true that this tendency is traceable to an inherited Spanish prejudice against trade, but this is all the more reason why the educational system should be so adjusted as to overcome, or at least counteract, such prejudices. The ambition of almost every family in these countries is to have their sons enter the legal or the medical profession, which has resulted in a degree of overcrowding unknown in any other portion of the civilized world.

This is, however, by no means the most serious consequence. The manifest tendency of so large a proportion of the intelligent young men to enter the legal and medical professions, together with the existing social prejudice against trade, has robbed these countries of their best talent in those fields in which they stand in greatest need of carefully trained men and women. It is largely due to this fact that important native business houses are the exception rather than the rule. The large fortunes of native-born Argentinians, for instance, have been built up on the increasing value of real estate, due to the natural growth of the country rather than to commercial or industrial initiative or enterprise. Industrial enterprises requiring constant application and assiduous attention are in the hands of foreigners.

^a Owing to the marked German educational influence, Chile has escaped some of the worst consequences of this system.

It is here that the Latin-American countries can secure their most valuable lesson from the experience of the United States. The remarkable development of our industrial and commercial schools represents the most conspicuous educational contribution of the United States. The freedom of choice by which a student upon entering the high school may, without the slightest loss of standing, elect any one of three or four possible courses has been of incalculable service to the country. It has given to trade and industry some of the best talent and capacity instead of making these callings the residual claimants for those who for one reason or another may be unfitted to follow the so-called "liberal professions." All the Latin-American countries require a change of attitude toward commerce and industry as compared with law and medicine. The system of secondary instruction can be so adjusted as to contribute toward this end.

Another lesson of American experience of much importance to the Latin-American countries is the necessity of training a corps of professional teachers for the "liceos," or high schools. Chile is the only country that has made an important move in this direction. In the Argentine Republic the teaching corps of the high schools, or "colegios," as they are called, is made up of practicing lawyers and physicians. The result is that there is an almost total absence of that personal contact between pupil and teacher which is the distinguishing characteristic of our educational system. A move in the right direction has been made in the high school attached to the national university of La Plata. In fact, under the direction of the president and vice-president of this institution, Doctor Joaquin Gonzalez and Doctor Agustin Alvarez, a new spirit is gradually being introduced into the Argentine educational system. In order to make the high schools fulfill their real purpose it will be necessary first to raise salaries to a level which will attract competent men, who will make a career of these positions rather than, as at present, a mere incident to other callings.

A third lesson of American experience of incalculable value to the Latin-American Republics is the necessity of giving greater attention to the education of women. In spite of superficial indications to the contrary, there is no other portion of the world where the influence of women is as far-reaching. In many respects it is greater than in the United States, owing to the fact that in the Latin-American countries the training of children is left almost exclusively to the mother. That fellowship and companionship between father and sons so characteristic of family life in the United States is almost totally lacking. The mother's directing influence is almost if not quite exclusive. It is only when the sons have reached an age at which it becomes neces-

sary to choose a profession or calling that the father's authority becomes prominent.

The surface appearances of Latin-American society are most misleading in this respect. As soon as one becomes acquainted with family organization and customs, the tremendous influence of the wife and mother immediately becomes apparent. The tendency to keep the young woman as far removed as possible from contact with real life, the atmosphere of artificiality with which she is surrounded, together with the inadequate and in many respects superficial education which she receives, react unfavorably on the character and stability of Latin-American society. The young woman enters upon the duties of wifehood and motherhood with either a false or totally inadequate idea of social and economic conditions. An exaggerated spirit of indulgence toward children, an acceptance almost without question of the idea that the sons must sow their wild oats, and the consequent lack of discipline which this involves, tend to develop a generation but poorly equipped with the qualities of self-control, determination, and continuous application so necessary to the development of a vigorous race.

Furthermore, the idea of preparing young women of the middle class to earn their livelihood is but beginning to find acceptance in the countries of Latin-America. A start in this direction has been made in several countries, but even where, as in the Argentine Republic, a special commercial school has been opened for women, both the course of study and the type of training are distinctly inferior to those given in schools for male pupils.

It is true that there still exists throughout Latin-America a strong social prejudice against the entry of young women into commercial and industrial pursuits. This fact makes it all the more important that the best facilities be offered to the comparatively small group prepared to weather this social tradition. No more important influence can be set at work to overcome a prejudice which is a real obstacle to national progress.

It is not possible, within the limits of this report, to present a detailed account of the educational systems of the Latin-American Republics. We must, therefore, content ourselves with a brief description of the leading traits of those countries which we have had the opportunity to study with some detail—viz, the Argentine Republic and Chile.

THE ARGENTINE REPUBLIC.

The impulse given to public education under the presidency of Sarmiento assured the Argentine Republic a position of leadership in educational matters among the South American Republics. Although much has been accomplished since that time, both in the

extension of the system and in the improvement of methods, it can not be said that the Argentine Republic has maintained that position of undisputed leadership in South American educational matters which it once occupied. The most serious obstacles to progress have been:

First. The poverty of the Provinces, upon which the responsibility for primary education was placed under the constitution of 1853, and—

Second. The lack of stability in the educational policy of the Federal Government in the development of the system of secondary instruction. The technical direction of this branch of the educational system has suffered severely from the uncertainties of political changes. Continuity of policy has been quite impossible. Each incoming minister of public instruction has attempted to leave his impress upon the system of secondary instruction by incorporating his personal views into the curriculum. Both the method and the content of instruction have suffered from this lack of stability and expert direction. It is only within the past two years that the necessity of divorcing the technical direction of the system from the conflicts of party politics has become apparent. The present minister of public instruction has recognized the importance of such stability by giving wider powers to the inspector of secondary instruction, who should be made in fact as well as in law the technical head of the system.

The Argentine educational system is divided into four distinct parts:

First. The elementary schools, for which the provincial governments are primarily responsible, but for the maintenance of which the Federal Government has been compelled to make large expenditures.

Second. The secondary schools, known as "liceos" and "colegios," and in which should also be included the normal schools, which are established, maintained, and controlled by the federal authorities, although the provincial governments may and in some cases have established institutions of the same grade.

Third. Commercial, industrial, and other special schools, which are, as a rule, established and supported by the National Government, but which may also be established by the provincial authorities.

Fourth. The three national universities, Cordoba, Buenos Aires, and La Plata, established and supported by the National Government.

PRIMARY INSTRUCTION.

The Argentine Constitution places upon the Provinces the obligation of maintaining a system of primary instruction. This obligation has been but partially fulfilled, owing in part to the lack of resources of the Provinces and in part to the absence of an organized public

opinion demanding the expenditure of a certain minimum of the public revenues on education. The failure of the Provinces to meet their obligations has made it necessary for the Federal Government to give the broadest possible interpretation to its constitutional powers; otherwise a large percentage of the people of the country would be deprived of all educational facilities.

In cooperating with the Provinces for the development of the primary-school system the Federal Government has acquired considerable control over this branch of the educational system. Wherever such schools are maintained by national funds, the federal authorities reserve control both over the curriculum and the personnel.^a

The Central Government, furthermore, maintains complete control over primary education in the federal capital, Buenos Aires, and in the national Territories. This control is exercised by a salaried national council of education (Consejo Nacional de Educación) appointed by the President of the Republic. During the fiscal year 1907 this council expended \$4,212,419 for the establishment and maintenance of primary schools in the federal capital, in the national Territories, and for the primary schools in the Provinces supported by federal funds.^b

With the gradual awakening of national opinion to the dangers incident to an inadequate system of primary instruction there is evident an increasing tendency to look to the Federal Government for the solution of this problem. The startling figures published by the superior council of education have given great impetus to the movement to nationalize the system of primary instruction. The present minister of public instruction has made this an integral part of his reform platform, and is convinced that there are no constitutional obstacles to the enforcement of the plan. His position has been greatly strengthened by the recent publication of data which give a graphic picture of the backward condition of primary education in the Argentine Republic. These figures, which are submitted in an accompanying table, will be supplemented by a school census now in progress, the detailed results of which will probably be available toward the close of this year or early in 1910.

^a During the first nine months of 1908 the federal subsidies for primary instruction in the Provinces amounted to \$548,359.57. The total for the year will amount to over \$1,000,000.

^b The number of primary schools in the Provinces maintained by the Federal Government is as follows (1907) :

Province.	Schools.	Province.	Schools.	Province.	Schools.
Santa Fe.....	28	La Rioja.....	32	Catamarca.....	38
Corrientes.....	34	Entre Rios.....	35	Salta.....	40
San Luis.....	43	Cordoba.....	34	Jujuy.....	27
San Juan.....	39	Mendoza.....	30		
Santiago del Estero...	39	Tucuman.....	38	Total.....	457

TABLE I.—Primary school statistics of the Argentine Republic.

Where situated.	Population Dec. 31, 1905.	School age as fixed by law.	School census.		School attendance.				Children of school age not attending school.		Percentage of children of school age not at- tending school.	
			Calculated on basis of school age deter- mined by national law, 6-14 years.	Calculated on basis of school population as deter- mined by local law.	In schools supported by Federal Govern- ment.	In schools supported by Provinces.	Private schools.	Total.	On basis of standard set by national law, 6-14 years.	On basis of standard set by law of the Provinces.	On basis of standard set by law of the Provinces.	On basis of standard set by law of the Provinces.
	1	2	3	4	5	6	7	8	9	10	11	12
PROVINCES.												
Buenos Aires.....	1,500,071	8-12	300,014	166,507	2,328	105,755	23,095	131,778	108,236	34,729	56.07	20.85
Santa Fe.....	744,422	a 6-12 b 6-14	148,884	132,283	3,863	38,363	16,138	58,364	90,520	73,919	60.79	55.87
Entre Rios.....	386,369	a 6-12 b 6-14	77,273	77,273	4,246	26,905	12,699	43,850	33,423	33,423	43.25	43.25
Corrientes.....	309,253	a 6-12 b 6-14	61,850	54,953	5,042	24,504	2,624	32,170	29,680	22,783	47.98	41.45
Cordoba.....	507,639	7-14	101,527	90,156	4,130	27,150	14,145	45,425	56,102	44,731	55.25	49.61
Tucuman.....	276,856	6-14	55,371	55,371	3,463	27,203	2,881	33,547	21,824	21,824	39.41	39.41
Mendoza.....	177,785	a 6-12 b 7-15	35,557	31,591	3,095	14,828	1,610	19,533	16,024	12,058	45.06	38.16
San Juan.....	106,011	6-14	21,202	21,202	4,110	10,127	757	14,994	6,208	6,208	29.28	29.28
La Rioja.....	84,536	6-14	16,907	16,907	4,697	5,225	137	10,059	6,848	6,848	40.50	40.50
San Luis.....	102,226	6-14	20,445	20,445	3,999	8,812	355	13,166	7,279	7,279	35.60	35.60
Catamarca.....	105,156	a 7-12 b 7-14	21,031	16,340	3,583	9,366	225	13,174	7,857	3,166	37.35	19.37
Santiago.....	191,120	a 7-12 b 7-13	38,224	27,578	3,084	14,772	1,158	19,014	19,210	8,564	50.25	31.05
Salta.....	139,886	a 6-12 b 6-14	27,977	24,857	3,287	8,858	750	12,865	15,082	11,962	53.83	48.20
Jujuy.....	57,277	a 7-12 b 7-14	11,455	8,900	1,617	3,961	118	5,696	5,759	3,204	50.27	36.00
Total.....	4,688,607		937,717	744,363	50,544	325,829	77,292	453,665	494,052	280,698	51.62	39.05
TERRITORIES.												
Misiones.....	41,174	6-14	8,294	.....	3,566	.....	186	3,752	4,482	.....	54.43	.....
Formosa.....	13,560	6-14	2,712	.....	710	.....	.....	710	2,002	.....	74.09	.....

	21, 423	6-14	4, 284	1, 950	.....	199	1, 950	2, 334	.....	54. 48	.....
Chaco.....	60, 806	6-14	12, 161	2, 873	.....	41	3, 072	9, 089	.....	74. 73	.....
Pampa.....	24, 249	6-14	4, 849	1, 238	.....	428	1, 279	3, 570	.....	73. 62	.....
Neuquen.....	21, 277	6-14	3, 255	1, 033	.....	138	1, 461	2, 794	.....	65. 66	.....
Rio Negro.....	10, 991	6-14	2, 198	881	.....	59	1, 019	1, 179	.....	53. 63	.....
Chubut.....	4, 092	6-14	818	110	.....	44	169	649	.....	79. 33	.....
Santa Cruz.....	1, 604	6-14	320	44	.....	176	176	276	.....	86. 25	.....
Tierra del Fuego.....	2, 708	6-14	541	176	.....	.....	.....	365	.....	67. 46	.....
Los Andes.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	201, 884	.....	40, 372	12, 581	.....	1, 051	13, 632	26, 740	26, 740	66. 23	66. 23
City of Buenos Aires.....	1, 084, 280	6-14	216, 856	90, 268	.....	45, 000	135, 268	81, 588	81, 588	37. 62	37. 62
RECAPITULATION.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Provinces.....	4, 688, 607	.....	937, 717	50, 544	.....	77, 292	453, 665	484, 052	290, 698	51. 62	39. 05
Territories.....	201, 884	.....	40, 372	12, 581	.....	1, 051	13, 632	26, 740	26, 740	66. 23	66. 23
City of Buenos Aires.....	1, 084, 280	.....	216, 856	90, 268	.....	45, 000	135, 268	81, 588	81, 588	37. 62	37. 62
Total.....	5, 974, 771	.....	1, 194, 945	153, 393	.....	123, 343	602, 555	592, 380	399, 026	49. 56	36. 83

a Girls.

b Boys.

The course of primary instruction includes six grades, each requiring one year. This portion of the educational system, especially in the city of Buenos Aires, is well organized. Modern pedagogical methods have been introduced, and a concerted effort is being made to supply these schools with the best of material. The great need at present is the extension of primary school facilities to a larger percentage of the population. For this purpose the provincial governments will be compelled sooner or later to secure larger revenues through taxation. At present real estate bears an altogether inadequate share of the burden of taxation. A considerable increase in the rate for the support and extension of primary education is the most important problem facing the Provinces. Unfortunately, there exists powerful opposition to this step, but it is to be hoped that the constant agitation of local educational associations will gradually arouse the taxpayers to the necessity of greater sacrifice for the public welfare.

THE SECONDARY SCHOOLS.

Secondary education in the Argentine Republic is controlled and maintained by the Central Government. The institutions for this grade of education are known as "colegios,"^a distributed as follows:

TABLE II.—*Distribution and budget of the colegios nacionales.*

No.	Colegio nacional.	Where situated.	Budget, 1908.
1	Central.....	Federal capital.....	\$154,954
2	North.....	do.....	93,757
3	South.....	do.....	122,025
4	West.....	do.....	99,983
5	Northwest.....	do.....	77,658
6	La Plata.....	Province of Buenos Aires.....	66,400
7	Dolores.....	do.....	22,550
8	Bahia Blanca.....	do.....	22,081
9	Mercedes.....	do.....	36,105
10	San Nicolas.....	do.....	22,136
11	Rosario.....	Province of Santa Fe.....	46,053
12	Santa Fe.....	do.....	38,984
13	Parana.....	Province of Entre Rios.....	38,268
14	Uruguay.....	do.....	39,035
15	Corrientes.....	Province of Corrientes.....	40,222
16	Cordoba.....	Province of Cordoba.....	59,933
17	Santiago.....	Province of Santiago del Estero.....	40,024
18	Tucuman.....	Province of Tucuman.....	48,065
19	Salta.....	Province of Salta.....	35,630
20	Jujuy.....	Province of Jujuy.....	33,084
21	Catamarca.....	Province of Catamarca.....	40,977
22	La Rioja.....	Province of La Rioja.....	34,959
23	San Juan.....	Province of San Juan.....	39,913
24	Mendoza.....	Province of Mendoza.....	53,436
25	San Luis.....	Province of San Luis.....	28,647
26	National school for young ladies.....	Federal capital.....	51,927

The course of instruction covers a period of five years and the curriculum is arranged with special reference to the needs of those intending to follow professional careers. In fact, it may be said that only those intending to follow such callings attend the "colegios."

^a The institutions for women are designated "liceos."

The student usually enters these institutions at the age of 12 and is prepared for one of the university professional schools at 17.

The instability of the curriculum of these institutions has been one of the most serious obstacles to their development. Every minister of public instruction, without exception, has undertaken to make some fundamental changes. The teaching corps has not been given opportunity to become thoroughly acquainted with any one course of study. This has reacted most unfavorably on the method of teaching as well as on the preparation of the teachers for their work. While it is important that the course of study be constantly adjusted to new needs, it is far more important that the teachers be thoroughly acquainted both with the plan of study and with the content of the subject entrusted to their care.

This lack of stability has also increased the difficulties of educational control. Complaints against incompetent teachers are met with the excuse that the constant changes in the curriculum have made it impossible to develop a well-organized pedagogical plan.

The Federal Government is making every effort to place these schools on a high plane of efficiency. Splendid buildings are being erected in the larger provincial towns and the most modern equipment is being provided. The greatest obstacle to the full development of these institutions has been the difficulty of securing carefully trained teachers. The organization and method of recruiting the members of the faculty have contributed largely to this end. The subjects of instruction are divided into "catedras," or "chairs," each "chair" including a minimum of three hours of instruction per week. For each "catedra" the incumbent receives about \$130 per month. Instead of training men especially for these positions, the unfortunate plan has been adopted, especially in the smaller towns, of dividing the "catedras" amongst the resident and practicing lawyers and physicians. It is not infrequent to find a physician teaching literature or a lawyer giving a course in physics. The most serious defect of this plan is that these teaching positions are regarded as merely incidental to the incumbent's main professional work, a means of adding to his personal income without considerable effort. The result is that these schools lack a permanent professional teaching staff in close personal touch with the pupils.

Another danger to which every minister of public instruction is subjected is the tremendous pressure for appointments to teaching positions in these schools. Inasmuch as there is no special pedagogical preparation requisite for such appointments, political leaders are besieged with applications, and soon find themselves unable to withstand the pressure.

The work in the "colegios" would also be much improved through greater elasticity, combined with greater simplicity of the curriculum.

The number of subjects taught is too large and the school hours too long. The division of subjects is as follows:

TABLE III.—*Curriculum of the colegios nacionales in the Argentine Republic.*

Subject.	FIRST YEAR.	Hours per week.
I. Spanish.....	-----	4
French.....	-----	4
Argentine history.....	-----	4
II. Arithmetic.....	-----	5
Argentine geography.....	-----	3
III. Drawing.....	-----	6
Manual labor.....	-----	
Gymnastics.....	-----	
		26
	SECOND YEAR.	
I. Spanish.....	-----	4
French.....	-----	3
Argentine history.....	-----	3
II. Arithmetic and bookkeeping.....	-----	5
Plain geometry.....	-----	3
Argentine geography.....	-----	2
III. Drawing.....	-----	6
Manual labor.....	-----	
Gymnastics.....	-----	
		26
	THIRD YEAR.	
I. Spanish (composition and literature).....	-----	3
French.....	-----	3
English.....	-----	4
American history.....	-----	2
II. Algebra.....	-----	3
Geometry.....	-----	3
Natural science (zoology, anatomy, physiology).....	-----	4
American geography.....	-----	2
III. Drawing.....	-----	6
Gymnastics.....	-----	
		30
	FOURTH YEAR.	
I. Literature.....	-----	3
English.....	-----	3
Italian.....	-----	2
History (ancient, Greek, Roman, middle age).....	-----	4
II. Algebra.....	-----	3
Physics.....	-----	3
Inorganic chemistry.....	-----	3
Natural science (physiology, hygiene).....	-----	3
Psychology.....	-----	2
Geography of Asia and Africa.....	-----	2

	Hours per week.
III. Drawing-----	6
Gymnastics -----	
	34
FIFTH YEAR.	
I. Literature-----	3
English-----	3
Italian-----	2
History (modern and contemporary)-----	4
Philosophy-----	3
Civic instruction-----	3
II. Natural science (botany, mineralogy)-----	4
Physics-----	3
Organic chemistry-----	3
Geography (Europe and Australasia)-----	2
III. Physical education-----	6
	36

The examination of this curriculum discloses a tendency to place in the secondary schools advanced subjects such as psychology and philosophy, which should be reserved for the universities. Furthermore, all pupils are required to take three languages—French, English, and Italian. The result is that they acquire a smattering of each and a thorough acquaintance with none. A far better plan would be to allow each pupil the selection of one, or at most two, languages and concentrate effort on these. Under the most favorable circumstances it is extremely difficult to teach languages in the large classes of a public school. When, therefore, the attempt is made to teach three languages in a curriculum which contains from eight to twelve subjects, the result of such overcrowding can readily be foreseen.

This evil can be remedied through the introduction of the elective system, permitting each pupil, at the beginning of the third year, to select the subjects in which he is most interested, and which will best prepare him for the professional studies upon which he enters immediately after leaving the “colegio.”

The description of secondary education would be incomplete without some reference to the large number of Catholic “colegios” under the direction of the religious orders—Jesuits, Redemptionists, etc. It is to these schools that the sons of the leading families are sent. The State exercises some control, but this control is quite inadequate. The important position occupied by private schools is evident from the fact that in the city of Buenos Aires there are at the present time 450 private as compared with 190 public schools.

The secondary schools for women are known as “liceos.” Of these there are but two at present in the Argentine Republic, one in Buenos Aires and the other in La Plata. Their curriculum is even more over-

burdened, for to all the studies of the "colegios" music and domestic science have been added.

The fact that there are but two such schools in the Republic indicates that the State has but begun to face the problem of secondary education for women. Heretofore the convents and other Catholic schools have enjoyed practically exclusive control over this important branch of the educational system. It is true that girls are admitted to the "colegios" on an equal footing with boys, but the prejudice against coeducation is still so great that but few girls attend these institutions.

NORMAL SCHOOLS.

Upon this branch of the Argentine system American methods have exerted a real influence. The country owes the first normal school organized in accordance with modern pedagogical standards to the efforts of a group of American teachers brought to the Argentine Republic by President Sarmiento for the normal school in the city of Parana, the capital of the Province of Entre Rios. The influence of this school has been felt throughout the educational system of the country, and has contributed in no small measure toward placing the normal schools of the Argentine Republic upon their present plane of efficiency.

There are at present 35 normal schools in the Argentine Republic, distributed as follows:

TABLE IV.—*Distribution of normal schools in the Argentine Republic.*

No. of school.	For which sex or whom designed.	Where situated.
1	Men.....	Federal capital.
2	Women.....	Do.
3	Teachers of modern languages.....	Do.
4	Women.....	Do.
5	Women (San Jose de Flores).....	Do.
6	Women, La Plata.....	Province of Buenos Aires.
7	Coeducational, Dolores.....	Do.
8	Coeducational, Azul.....	Do.
9	Coeducational, Bahla Blanca.....	Do.
10	Coeducational, Mercedes.....	Do.
11	Coeducational, San Nicolas.....	Do.
12	Coeducational, Chivilcoy.....	Do.
13	Coeducational, Pergamino.....	Do.
14	Women, Rosario.....	Province of Santa Fe.
15	Women, Santa Fe.....	Do.
16	Coeducational, Esperanza.....	Do.
17	Coeducational, Parana.....	Province of Entre Rios.
18	Women, Uruguay.....	Do.
19	Women, Corrientes.....	Province of Corrientes.
20	District normal school for men, Corrientes.....	Do.
21	Women, Cordoba.....	Province of Cordoba.
22	Coeducational, Rio Cuarto.....	Do.
23	Women, Santiago.....	Province of Santiago del Estero.
24	Women, Tucuman.....	Province of Tucuman.
25	Coeducational, Monteros.....	Do.
26	Women, Salta.....	Province of Salta.
27	Women, Jujuy.....	Province of Jujuy.
28	Women, Catamarca.....	Province of Catamarca.
29	District normal school for men, Catamarca.....	Do.
30	Women, La Rioja.....	Province of La Rioja.
31	Women, San Juan.....	Province of San Juan.
32	Women, Mendoza.....	Province of Mendoza.
33	Women, San Luis.....	Province of San Luis.
34	District normal school for men, San Luis.....	Do.
35	Coeducational, Villa Mercedes.....	Do.

The regular course is four years, with two additional years for those who wish to obtain a certificate qualifying for teaching positions in the normal schools. The course of study is as follows:

TABLE V.—*Course of study in Argentine normal schools.*

Subject.	FIRST YEAR.	Hours per week.
Arithmetic	-----	3
History (ancient, Greek, and Roman)	-----	3
Geography (Asia and Africa)	-----	2
Spanish	-----	4
French	-----	3
Natural science (zoology and botany)	-----	3
Physics and chemistry	-----	3
Pedagogy 2, practice 3	-----	5
Physical training (manual labor, drawing, music, housekeeping and domestic economy, agriculture, and gymnastics)	-----	10
		36
	SECOND YEAR.	
Arithmetic and algebra	-----	3
History (middle age and modern)	-----	2
Geography (Europe and Australasia)	-----	2
Spanish	-----	3
French	-----	3
Natural science (mineralogy and geology)	-----	2
Physics and chemistry	-----	5
Pedagogy 2, practice 4	-----	6
Physical training	-----	10
		36
	THIRD YEAR.	
Algebra and geometry	-----	3
History (contemporary and Argentine)	-----	3
Geography (Argentine and American)	-----	2
Spanish	-----	3
French	-----	3
Natural science (anatomy and physiology of man)	-----	2
Pedagogy 2, practice 6, criticism 2	-----	10
Physical training, etc	-----	6
		32
	FOURTH YEAR.	
Cosmography	-----	2
History (Argentine and American)	-----	2
Literature	-----	2
Moral and civic instruction	-----	3
Natural science (physiology, hygiene, both domestic and of the school)	-----	2

	Hours per week.
Pedagogy and psychology 4, criticism 2, practice 9.....	15
Physical training, etc.....	4
	<hr/> 30

SUPPLEMENTARY COURSE FOR TEACHERS IN NORMAL SCHOOLS.

FIRST YEAR.

Pedagogy (science of education, practice, and criticism).....	8
Algebra and geometry.....	3
History of civilization.....	3
Fundamental psychology.....	4
Physiology (applied to psychology).....	3
Literature.....	3
English.....	6
	<hr/> 30

SECOND YEAR.

Pedagogy (including practice and criticism).....	10
Hygiene.....	3
General physical geography.....	2
Cosmography and topography.....	3
Psychology of the child.....	3
Literature.....	3
English.....	6
	<hr/> 30

This curriculum is open to the same criticism of overcrowding as the course of study in the "colegios nacionales." This is a defect, however, which can be readily remedied. On the other hand, there is noticeable within recent years a healthful tendency to give a more important place to the study of Argentine history, and to the economic, social, and political development of the country. This change is certain to exert an excellent influence upon the method and content of instruction in the primary schools.

SCHOOLS OF COMMERCE.

Commercial education is still in its infancy in the Argentine Republic as in all other sections of South America. Buenos Aires has three such schools (two for men and one for women), Bahia Blanca one, Rosario one, and Concordia one.

The courses offered are in the main elementary, similar in many respects to the curriculum of our so-called "business colleges." The course for men covers four years, that for women three years. An effort is now being made to give to women the same training as to

men, but this plan has encountered considerable opposition owing to the fear of possible competition.

Higher commercial education as a distinct branch of university training, which now occupies so important a position in the United States, has not as yet found acceptance either in the Argentine Republic or in any other South American country. Nevertheless, the schools of commerce, as at present organized, are doing excellent service both in their day and night courses. There is, however, great need of a clearer appreciation, on the part of the educational authorities, of the importance of these institutions and the necessity of devoting a larger portion of the educational budget to their development. It would, in fact, be desirable to introduce into the "colegios" a special commercial course, giving to pupils the choice between this course and that leading to law, medicine, or engineering. In this way commercial education would be placed upon a distinctly higher plane, attract a better class of students, and tend to relieve the pressure in the overcrowded professions.

INDUSTRIAL EDUCATION.

Although a start has been made in this direction, it may still be said that the Argentine authorities have but begun to appreciate the intimate relation between this type of education and national progress. The educational ideals which dominate the Argentine system are still largely humanistic. Spanish traditions and Spanish training have for many years obscured the essential dignity of manual labor.

At present there are but two public industrial schools for boys, one in Buenos Aires and the other in Rosario. There are, in addition, a considerable number of private industrial schools, notably the school founded in Buenos Aires by the Association for Industrial Education.

Of the two public industrial schools above mentioned, the national institution in Buenos Aires, for which a new building has been constructed recently, deserves special mention. Both as regards equipment and method of instruction it is admirably organized and is rendering splendid service to the country. Pupils enter this school after having completed four years of primary instruction. The course extends over six years, two years preparatory work, two years of general instruction, and two years of specialized instruction leading to the following trades: (1) Master mechanic, (2) builder, and (3) industrial chemist.

The success of the two schools established by the National Government indicates the direction in which effort should now be concentrated. The country requires the multiplication of such schools to a far greater degree than the "colegios." If the educational system of

the country is to be symmetrically developed, national industrial schools must be established in every provincial capital.

The industrial schools for girls are known as "escuelas profesionales," and are rather in the nature of trade schools. There are four such schools supported by the National Government, three in Buenos Aires, and one in Cordoba.

SPECIAL SECONDARY SCHOOLS.

In addition to the secondary schools above enumerated there are a number of special schools which deserve mention, such as the National Institute for Secondary Teachers, the National Academy of Fine Arts, the Normal Institute for Physical Culture, all in the city of Buenos Aires, and the National Institute of Chemistry, situated in San Juan, the capital of the Province of the same name.

THE NATIONAL UNIVERSITIES.

Of the three national universities, the oldest is the University of Cordoba, founded nearly three centuries ago. In fact, it is the second oldest university on the American Continent, having been founded in 1609, fifty-eight years after the University of San Marcos, of Lima, Peru.

The other two universities, Buenos Aires and La Plata, are comparatively recent foundations, the latter having been established but four years ago.

These institutions are maintained exclusively by federal appropriations. There are no tuition fees and the matriculation and graduation fees are very low. For the year 1908 the appropriations for the maintenance of these institutions were as follows: University of Cordoba, \$276,825; University of Buenos Aires, \$449,350; University of La Plata, \$430,000.

University organization in the Argentine Republic resembles more closely the French than the American system. The faculties are to a very considerable extent independent of one another. It is true that each university has its president, but with the exception of the University of La Plata this office does not carry with it anything approaching the powers of a university president of the United States.

The absence of coordination and cooperation amongst the several faculties has been one of the fundamental weaknesses in the development of university influence in the Argentine Republic. It was with a view to remedying this defect that a different system was adopted in the organization of the National University of La Plata, established but four years ago. American university organization was used as a model after which the new institution was patterned. Instead of

making the president a mere figurehead he was vested with supervisory powers over all the faculties. The result has been a unity of university effort which neither of the older institutions has been able to attain.

In each of the three universities there is a faculty of law, a faculty of philosophy and letters, a faculty of natural sciences, and a faculty of physical and mathematical sciences. Cordoba and Buenos Aires have also a medical faculty.

The material equipment of all the professional schools, especially the medical school of the University of Buenos Aires, is excellent. Instruction in all the faculties, however, suffers severely from the lack of contact between student and professor. Most of the members of the instructing corps—and this is particularly true of the law faculties—interpret their duties narrowly, confining themselves to formal lectures, with examinations at stated periods. Thus the educational value of close contact between student and professor, upon which so much stress is laid in the United States, is entirely lost. Too much stress is laid on the final examination tests, whereas the work of the student during the college year is almost totally neglected.

In this respect, also, the policy of the National University of La Plata, under the wise guidance of its present president and vice-president, marks a distinct step in advance. Students are required to keep their work at a certain standard of efficiency, professors are encouraged, in fact required, to enter into close touch with their students. The result is that there is gradually developing an *esprit de corps* which is having a most salutary influence on the growth of this institution.

The National Government has been most liberal with its three universities, especially within recent years. Plans have been matured for magnificent new buildings for the faculty of physical and mathematical science (which includes engineering) of the University of Buenos Aires; a great new hospital costing \$6,000,000 is to be erected as an adjunct to the medical school. Cordoba is to have a series of new buildings to commemorate her tercentenary.

CHILE.

Educational progress in Chile presents a striking contrast with the Argentine Republic. In the Argentine Republic the democratic development of the country since 1850 led to the early development of primary education. Secondary and university instruction received but little attention. It is true that the Argentine educational system remained in a primitive state until the presidency of Sarmiento. Nevertheless, even up to his time more attention was given to primary

than to secondary schools. The aristocratic social organization of Chile, on the other hand, led to the concentration of effort on the development of the secondary schools. As a result, Chile possesses the best "liceos" and "institutos" in South America. Unfortunately, the system of primary education was neglected for many years and resulted in a degree of illiteracy amongst the masses which made impassable the chasm between social classes. The country is now suffering from the results of this long-continued neglect. With the industrial progress of the country the economic condition of the laboring classes has been steadily improving, but owing to their ignorant condition and total lack of preparation, the higher wages have in many cases resulted in degeneration rather than progress. The primitive wants of the agricultural laborers were satisfied by the lower wage, and the surplus has been used, to a very considerable extent, in an increased indulgence in spirituous liquors. Saving is almost unknown to the Chilean laborer, so that the increased wages have not led to a more careful provision for the future of the family.

On the other hand the increased wages, in bettering the situation of the laborer, has also given rise to a spirit of discontent, a desire for a larger share in production. The ignorance of the laborer makes him an easy prey to demagogic agitation. It is not surprising, therefore, to find the violent outbreaks of discontented laborers which have occurred from time to time within late years, and of which the most recent instance was the strike of the nitrate workers in Iquique, which led to the mowing down of 500 men and women with the machine guns of the troops.

The problem of overwhelming importance now confronting Chile is the improvement and extension of the system of primary education. It is only through the education of the masses and the consequent bridging over of the tremendous chasm that now separates the wealthy and educated from the uneducated and poorer classes that Chile will be able to retard the growth of discontent.

Her leading statesmen are fully alive to the dangers of the present situation, and it is most gratifying to find the concentration of effort in the last few years on the development of the system of primary education. Rapid progress is now being made, although the decline in national income, due to the economic crisis through which the country has been passing, has given a temporary setback to the movement.

PRIMARY EDUCATION.

The Chilean educational system in all its branches is national in scope and organization, that is to say, is maintained by the national treasury. No local taxes are levied for educational purposes and the

local authorities have no voice in the administration of or control over the system.

Although this lack of local cooperation in the development of the educational system has been unfortunate in many respects, it was inevitable in the absence of a well-defined public opinion upon which a local system might depend.

In marked contrast with the Argentine system, the organization of primary education in Chile is highly centralized. Teachers are appointed and paid by the Central Government and central supervision is maintained over every detail of educational organization. While subject to the final authority of the President of the Republic and the minister of public instruction, the direct control over the system of primary instruction is exercised by an inspector-general.

It is a curious fact worthy of note, for it throws an interesting side light on Chilean social conditions, that the secondary schools, or "liceos," have gradually invaded the field of the primary school through the establishment of preparatory courses. These institutions depend upon a totally different educational authority—the council of public instruction and the president of the University of Chile.

The preparatory courses of the "liceos" are attended by the sons of the well-to-do families, whereas the regular primary courses are attended by the poorer element of the population. Thus, in fact, two systems of primary education exist side by side, dependent upon different educational authorities and attracting totally different classes of the population. For this reason the primary schools have not contributed as much as might be expected toward breaking down the class barriers so marked in Chilean society.

During the past fifteen years the leading statesmen of Chile have realized that this neglect of primary instruction is a real menace to the stability and orderly development of the country. The social organization of Chile is still fundamentally aristocratic. Until comparatively recent times the bulk of the population, especially the agricultural laborers, were in a condition of peonage. The industrial advance of the country, together with the rising wage scale, has produced in the laboring classes a consciousness of power. The illiteracy of the great mass of the laboring classes greatly increases the dangers of the situation. The extension of primary instruction has therefore become one of the conditions prerequisite to orderly national advance. The country must now prepare itself to make every sacrifice for this purpose.

During the past sixteen years the primary-school facilities have increased as follows:

TABLE VI.—*Growth of primary schools in Chile.*

Year.	Number of schools.	Teachers.	Registra- tion.	Average attend- ance.	Relation of attend- ance to registra- tion.
					<i>Per cent.</i>
1891	1,182	.....	97,452	64,737	67.8
1892	1,156	.....	100,554	71,179	70.7
1893	1,222	2,042	102,711	72,899	70.9
1894	1,224	2,070	117,489	72,925	62.1
1895	1,248	2,145	114,565	71,901	62.7
1896	1,269	2,169	111,361	81,168	72.9
1897	1,321	2,268	109,058	65,507	60.0
1898	1,368	2,308	99,889	65,619	65.7
1899	1,403	2,299	106,348	70,607	66.4
1900	1,547	2,692	115,281	72,761	63.1
1901	1,700	3,080	124,265	79,666	64.1
1902	1,821	3,426	145,052	97,692	67.3
1903	1,861	3,608	167,028	108,562	65.0
1904	1,942	3,999	159,297	107,905	67.7
1905	2,156	4,531	170,827	106,041	62.3
1906	2,233	4,639	178,402	105,501	59.1
1907	2,319	3,997	197,174	121,176	61.4

From this table it will be seen that the attendance in 1907 shows an increase of 15,675 over 1906.

The curriculum of the primary schools in Chile is considerably less overburdened than in the Argentine Republic. The system has, furthermore, been considerably improved by the introduction of manual training in 1899. This was begun on a small scale in 10 schools, and has gradually been extended until in 1907 there were 120 workshops installed in as many public schools. In all the girls' schools sewing has been made an integral part of the curriculum. A new plan which is about to be put into operation is to permit pupils to devote the last of the six years of primary instruction to special training in the mechanic arts.

NORMAL SCHOOLS.

In the Chilean system the normal schools and the primary schools are dependent upon the same educational authority—the inspector-general of education. There are at present 15 normal schools—6 for men and 9 for women.

Owing to the low salaries paid to primary-school teachers, the normal schools are neither as numerous nor as largely attended as the educational needs of the country require. In 1907, it is true, salaries were considerably increased,^a but considering the high cost of living in Chile, the salaries are still far too low. Calculating the "peso" at

^a Owing to the financial crisis the increase was paid to but a portion of the teachers.

the present rate of exchange of 25 cents, the remuneration is as follows:

Teachers:	Salary per year.	Assistants:	Salary per year.
First class.....	\$450	First class.....	\$300
Second class.....	300	Second class.....	254
Third class.....	270	Third class.....	225
Fourth class.....	240	Fourth class.....	180

After ten years of service the teacher is entitled to an increase of 20 per cent.

In the 9 normal schools for women the matriculation in 1907 was 1,255, with an average attendance of 1,029; in the 6 normal schools for men the matriculation was 722, with an average attendance of 580.

SECONDARY SCHOOLS.

The secondary schools, or "liceos" as they are called, are under the control of a national council of education appointed by the President of the Republic, of which the president of the national university is a member *ex officio*.

There are in all 39 such establishments for boys and 30 for girls, each with its respective preparatory course.^a

The matriculation and attendance are as follows:

	Registration.			Attendance.		
	Preparatory.	Regular.	Total.	Preparatory.	Regular.	Total.
Liceos for boys.....	3,991	5,311	9,302	3,341	4,555	7,896
Liceos for girls.....	2,628	2,182	4,810	2,060	1,779	3,839

The development of secondary schools for girls has been extraordinarily rapid considering the fact that no attention was paid to this branch of the system until 1877.

Although technically classed as a part of the national university, the pedagogical institute may best be considered in connection with the system of secondary instruction, for it is in this institute that teachers for the "liceos" are trained. Founded twenty years ago, this institute was at first intended exclusively for male pupils, but was later on made coeducational. During this time 310 secondary school teachers have been graduated. The number of students has increased rapidly. In 1907 there were 205 students registered.

^a The Internado Barros Arana for boys (Santiago) and Liceos Nos. 4 and 5 for girls (Santiago) have no preparatory courses.

The curriculum of the Instituto Pedagógico is planned to prepare specialists. It is therefore divided into seven distinct sections: (1) Spanish, (2) French, (3) English, (4) German, (5) history and geography, (6) mathematics and physics, (7) biology, chemistry, and mineralogy.

All students are required to take pedagogy, experimental psychology, logic, ethics, the history of philosophy, civics, and educational organization and legislation. The full course covers a period of four years.

The plan of study in this institution, as well as the method of instruction, are distinctively German. In fact, the entire faculty, with the exception of the director, has been recruited from the German secondary schools. This is probably the best instance of that quiet and unpretentious extension of German intellectual influence which is far more significant than her commercial advance. The German Government has been deeply interested in meeting every request of the Chilean people for competent teachers. At comparatively moderate salaries Chile has secured from Germany a group of teachers who now dominate the system of secondary education, and their influence is also being felt throughout the system of primary instruction.

This readiness of Germany to be of service contains a lesson of much importance to the United States. There has been no lack of requests on the part of the Latin-American governments for American teachers, but there has been considerable difficulty in meeting these requests, owing in part to the question of language, but mainly to the lack of adaptability of the average American teacher. Germany is performing a great service to the countries of Latin America—the kind of service that establishes her influence far more effectively than any attempt at extension of dominion.

SPECIAL AND TECHNICAL SCHOOLS.

Commercial education is still in its infancy in Chile. As a result of long-continued agitation on the part of a group of public-spirited citizens, an excellent commercial school was established in Santiago in 1898. Its success has been such that an appropriation was secured from the national government for a new building. Similar schools, but on a more modest scale, have been established in Valparaíso, Vallenar, Iquique, Coquimbo, Talca, Concepción, Antofagasta, and San Carlos.

The total registration at these schools in 1906 was 1,453, with an average attendance of 1,080. The total outlay for the year was nearly \$100,000.

The entrance requirements to these schools are the same as for the "liceos," and the regular course covers a period of three years. In addition, there are special courses of two years for clerks and accountants. Although the first steps toward the development of a system of commercial education have been taken, the idea of higher commercial education has as yet made but little headway.

The present commercial courses are, in the main, of an elementary character. The students enter at the age of 12 and usually leave at 14 or 15. The further development of the system is a matter of as much importance to Chile as to the Argentine Republic. On all sides one hears complaints of the unwillingness of the sons of the better families to enter upon business careers. Higher commercial education will tend to counteract the tendency toward the overcrowding of the professions.

INDUSTRIAL EDUCATION.

In the school of mechanic arts, situated at Santiago, an important step has been taken toward the establishment of a comprehensive system of industrial education. To this great school pupils from all parts of the country are sent. The courses are eminently practical and the training thorough. The great service performed by this school indicates the necessity of establishing similar institutions in all the larger towns of the republic. In fact, it may be said of Chile, as of all the other countries of South America, that the educational problem of overshadowing importance at the present time is the extension of industrial education and technical instruction. This necessity is due in part to the fact that the present scholastic system directs far too large a proportion of the young men into the study of law and medicine.

A beginning has been made in Santiago toward the establishment of industrial training for girls. As yet the industrial opportunities for women are exceedingly limited. The Santiago school has, therefore, confined its attention to the training of young women for dress-makers, hatmakers, and the minor commercial positions. The industrial emancipation of women is, however, a most important factor in the social progress of the country, and it is through schools such as these that this emancipation will be effected.

PRIVATE SCHOOLS.

The description of the school system of Chile would be incomplete without some reference to the large number of private schools of both primary and secondary grade. Many of these are subsidized by the Government, others are maintained by the Catholic Church or by

private associations. The number of private primary schools is indicated in the following table:

	Number of schools.	Number of teachers.	Pupils ma- triculated.
Private primary schools:			
Subsidized by the Government.....	196	634	26,564
Not subsidized.....	176	326	11,601
Total.....	372	960	38,165

Primary school census, 1906.

Public schools.....	103,685
Private schools.....	38,165
Military schools (army and navy).....	4,212
Total.....	146,062

During the same year (1906) the Government granted subsidies to 44 private secondary schools.

UNIVERSITY INSTRUCTION.

University instruction has been more fully developed than any other portion of the educational system. The council of public instruction, under whose immediate charge the university is placed, has wielded great influence, and has always been able to secure relatively large appropriations for university instruction. The administrative head of the university is the president, or "rector," as he is called, who is at the same time ex officio member of the council of public instruction.

At the present time the university offers courses in law and political science, medicine, pharmacy, dentistry, engineering, architecture, and fine arts. The pedagogical institute also forms an integral part of the university organization. The teaching corps, number of students, and budget are indicated in the following table:

TABLE VII.—*Instructors, students, and budget of the different faculties of the University of Chile.*

Faculty.	Instruct- ing corps.	Students.	Budget.
Law and social sciences (including special course in city of Concepcion).	44	491	\$21,000
Medicine and pharmacy, and nurses' training school.....	32	294	55,360
Dentistry.....	5	89	8,800
Engineering.....	19	149	29,646
Architecture.....	15	43	12,075
Pedagogy.....	12	221	26,983
Fine arts.....	11	135	7,530
Total.....	138	1,422	161,394

University instruction in Chile suffers from the serious defect of an overemphasis—in fact, almost complete dependence—upon examinations as a means of controlling the work of the students. There is little or no contact between student and professor, and as a rule the student interprets his university life as a series of lectures, followed by examinations. The result is a lack of distinctive student life, which is the most serious obstacle to the development of the broadest university influence.

Dr. Valentin Letelier, who was until recently rector, made a strenuous effort to remedy this defect. He impressed on the students the essential unity of university life and the necessity of closer cooperation amongst the students of the different departments. Probably the most important step taken has been the establishment of a student center, or club house, adjoining the university building. Doctor Letelier is keenly alive to the necessity of developing a distinctive university life which will include the entire student body. He has done a service to higher education in Chile the value of which will only be fully realized by future generations.

One of the most important changes which the present situation calls for is the recognition of membership in a university faculty as a distinctive career, commanding and demanding all the time and attention of the incumbent. At present a university professorship in Chile is looked upon in much the same way as in the Argentine Republic—a mere incidental activity to current professional activities. The result is a lack of esprit de corps, which has been a serious obstacle to the advance of higher education in Chile.

The description of higher education would be incomplete without some reference to the Catholic University situated in Santiago, which offers courses in law, civil and mining engineering, architecture, fine arts, and agriculture. The law school has 185 students; the engineering school, 396; the agricultural school, 12; and the school of fine arts, 55. In all of these departments the equipment is excellent, and the teaching corps has been selected with great care.

The Catholic University occupies an unique position. Its main supporters are the members of the conservative party. Inasmuch as the wealthier elements of Chilean society are to a very large extent affiliated with this party, the donations and bequests reach a large total each year. In fact, this is one of the few instances in Latin America in which a great national institution is supported exclusively by private contributions. The rivalry existing between the national and the Catholic universities has proved of real benefit to both, protecting them against the stagnation and fossilization which is the inevitable consequence of monopoly.

APPENDIXES.

[The two following papers, which have been prepared in this bureau, are appended here for the purpose of supplementing and illustrating with further details Doctor Rowe's account of educational progress in the Argentine Republic and Chile.]

APPENDIX I.

HISTORICAL SKETCH OF EDUCATION IN THE ARGENTINE REPUBLIC.^a

By Prof. CARLOS O. BUNGE, of the University of Buenos Aires.

CONTENTS.—I. Education during the colonial epoch. II. Education of the Indians. III. The University of Córdoba. IV. Education in Buenos Aires and the coast during the nineteenth century. V. University studies in the second half of the nineteenth century. VI. Character of modern instruction in the Argentine Republic.

I.

Education during the colonial epoch.—The conquest and colonization of Spanish America were effected at a time when the divine right of kings was an unquestioned fundamental dogma of the political creed of European nations. The principal object of all the laws relating to the Spanish colonies and their institutions was to maintain the new lands and peoples under the temporal and, to a certain extent, under the ecclesiastical dominion of the Catholic King.

Theoretically, the supreme object of the conquest and of the maintenance of sovereignty over the subjugated Indians was their conversion to Christianity and the salvation of their souls. It was attempted, first of all, to create a new Catholic population under the double authority of the Spanish Crown and the pontificate.

What with its incessant wars of religion, in the expulsion of the Arabs and Jews, and in the extirpation of heresy, the mother country found itself at the time of the conquest, in the sixteenth century, in a precarious situation, both economical and industrial. Its necessities kept on increasing, while its resources diminished. Under such circumstances the eagerness with which the Royal Government, and private individuals as well, sought the riches of the New World can be readily understood. The monopolistic system which was then established, which now seems to us so unjust, was imposed upon the Government by the fatality of history. America being regarded as an immense trading station, the army, the civil officers of the Government, and the commercial houses all concerned themselves but little with the intellectual culture of the new colonies. It might even be said that the ignorance of the natives and of the creoles was regarded as a favorable circumstance for keeping the colonies submissive under the severe political and economical regimen to which they were subjected. Yet, aside from its lofty ideal of evangelizing the Indians, it was also for the interest of the Crown to educate the creoles, if not from the ampler and more generous point of view of providing them with superior culture, at any rate from the selfish motive of educating them in political and religious obedience, so as to keep them more easily under the yoke.

^a Translated (with some omissions) from *El Monitor de la Educación Común*, October 31, 1908.

The prevailing ideas of the epoch and especially the unequivocal support of the church sanctioned these political views of the Spanish monarchy, and in consequence colonial education assumed a pronounced religious character. The papacy and the King in Europe, and the regular and secular clergy in America, supported by the Spanish officials, were the factors of all education during the Spanish domination.

The priests and missionaries who accompanied the conquerors, inflamed with apostolic zeal, devoted themselves ardently to the conversion of the natives, and after the conquest was assured and Spanish settlements were established they opened their cloisters for the education of the creoles. Still later they took measures to form a local clergy in the colonies which should be graduated from universities like those in the Catholic countries of Europe. The Crown favored this initiative of the church, which was undertaken especially by the missionary orders, by the Jesuits above all, but also by Franciscans and Dominicans. A series of statutes and decrees was promulgated by the council of the Indies in which the system of education founded by the clergy was approved and fostered, and regulations were formulated for its government. The King, in virtue of his right of patronship, constituted himself the supreme head of religious instruction, although he respected the autonomy of the establishments and institutions conducted by the clergy. The apostolic approbation of the Pope was always sought in founding universities.

The Laws of the Indies contain the royal decrees relating to what would now be called public instruction.

There was no methodical plan, but some form of instruction was instituted in each locality according to its condition and resources. The classical forms of the teaching bodies of the middle ages, which required that the instruction should be strictly dogmatic in its character, were recognized in these decrees. In such distant lands and among such a wild and turbulent mixed population as they contained a severe discipline in habits of obedience to the Crown and church was indispensable. The Government therefore, always fearful of insubordination, reenforced by its authority the educational system based upon dogmatism and obedience which the Jesuits had already established in Spain and in nearly all the Catholic world.

The Government's first case was to see that the sons of caciques who would have to govern the Indians should be taught the holy Catholic faith. Colleges were established for this purpose in the different colonies, in which the children were placed under the care of priests, who taught them good manners and the Spanish language, and who later opened schools for all Indian children for instruction in the gospel, where they learned reading and writing besides the catechism. Among the ecclesiastical institutions which took charge of the education of the Indians the best organized and most important were those called "reducciones," which were institutions conducted by the Jesuits where converted Indians were formed into docile colonies of agricultural laborers, whose daily routine was minutely prescribed for them by their religious masters. These institutions, which were established in the early colonial period, reached a high degree of development in the seventeenth century, but when the priests were expelled by King Carlos III at the close of the eighteenth century, the Indians, being deprived of their teachings, soon relapsed into their natural condition of savagery, thus showing themselves incapable of profiting, unsustained, by the Catholic culture they had been accustomed to receive. Primary instruction—reading, writing, and religion—was provided for in the mission schools and certain small colleges. What would now be called secondary and superior instruction was given in the universities. The colonial universities

may be divided into two classes—the official institutions, which were founded by the Crown, like those of Lima and Mexico, and the private institutions, which were established by the regular or secular clergy, were then authorized by the Pope, and were recognized by the Crown through concessions which were prolonged indefinitely. The University of Cordova belongs to this last category. It was the highest and most typical exponent of the colonial culture of Paraguay, Tucuman, Buenos Aires, and the Banda Oriental of Uruguay, which together constituted in the later period of Spanish rule the large and rich viceroyalty of Rio de la Plata.

The universities, like the lower schools, grew up under the shadow of the church. They were, to a certain extent, autonomous and of a pronounced ecclesiastical character, while the Crown regulated their minutest affairs by royal decrees. The viceroys could not intervene in the selection of rectors or professors or in the granting of decrees. The former, elected by the body of graduates, held office for one year, but were eligible for reelection. The professors were of two categories, those who held their positions during good behavior and those whose terms lasted four years. The instruction was of a pronounced theological character. The principal object of the universities was to graduate a creole clergy who should keep the principle of the divine right of kings alive and strong in the colonies.

II.

Education of the Indians.—As was remarked above, theoretically the lofty aim of the Spanish conquest of America was the conversion of the Indians. But this ideal did not attain the desired result. The Indians did not mix freely with the Europeans and always remained, at bottom, essentially anti-Christian. The task of the evangelizers encountered an insuperable obstacle in human nature itself. For notwithstanding that Christianity proclaims the equality of mankind, modern biological theories are far from regarding this equality as absolute or even evident. History records the fatal disappearance or submergence of inferior races before their conquerors, their remnants appearing as castes or slaves. Force was always the predominating element in conquest, while persuasion played a secondary part. The contrast between the barbarism of most of the American Indians, outside of Mexico and Peru, and the civilization of the Spaniards was too great, added to the radical difference of race, to be easily obliterated, so that the conquered people were forced to remain in an inferior condition. The natives, for the most part, accepted their condition of vassalage as inevitable, and the position of the missionaries who, like Las Casas, sincerely believed in and preached the Christian doctrine of universal brotherhood, was thus rendered doubly difficult by coming in conflict with the interests of the conquerors on the one hand and the obvious inferiority of race and the acquiescence of the conquered on the other. Under these circumstances the missionaries could, at best, only assuage the severity of the servitude of the conquered races and lighten their yoke. This they accordingly effected through the Jesuit system of semireligious colonies referred to above, and the general Christianizing of the indigenous population by the other Catholic clergy. As proof that the Indians were not the equals of Europeans, reference is made to their want of initiative, activity, and intelligence, and to the fact that after the expulsion of the Jesuits the mission Indians found themselves more helpless than ever. Instead of augmenting their natural forces the Jesuit system had debilitated them. The same Christianity which added strength to the conquerors had only enervated the unfortunate conquered people. In a word, experience has demonstrated that the pure Indian was not Christianizable. Nevertheless, evangelization produced certain good results in

the mixed bloods, descendants of the Spaniards and Indians, giving them a sense of cohesion and social harmony which facilitated the introduction in later times of the democratic idea. Without knowing it, those persevering and unpretending missionaries of the early days, who preached the gospel to savages in virgin forests, were contributing their mite to the future growth of democracy and lay civilization among the free peoples of Spanish America.

III.

The University of Cordova.—In the early part of the seventeenth century the Jesuits, who were established in the city of Cordova, founded there a college of their order called the "Colegio Maximo." In 1613 the Bishop of Tucuman granted the society funds for the purpose of widening the scope of the institution and giving higher instruction in Latin, the arts, and theology to the students of the Colegio Maximo itself, as well as to students who might come from Paraguay and elsewhere. The Colegio Maximo was opened under the new régime in 1614, and after it had acquired reputation it was raised by pontifical and royal decrees to the dignity of a university, until in 1622, by order of Philip III, it was authorized to grant the degrees of bachelor, licentiate, master, and doctor. The university was divided into two faculties, one of arts or philosophy and the other of theology. The faculty of arts comprised logic, physics, and the metaphysics of Aristotle, the courses occupying three years, after which there were two years of practice for the students, during which they were obliged to give lectures. The course in the theological faculty was four years, which was also followed by two years of practice or probation. The method of study was the mnemonic or the purely scholastic. In the three courses of the faculty of arts the instruction was cyclical; that is to say, one of the courses of study was completed and then dropped, and then another was taken, to be completed and dropped in its turn. The great defect of this system was, however, corrected by the two years of review or repetition, when the students were required to lecture. The philosophy studied at the university was the peripatetic or Aristotelian. Theology was taught from the *Summa Theologiæ* of St. Thomas Aquinas and the *Liber Sententiarum* of Peter Lombard. To this was added the vast work of Suarez, comprising the exposition of all the doctrines of the Society of Jesus. The studies of the faculty of arts were preparatory to those of the faculty of theology, yet it furnished the degrees of bachelor, licentiate, and master of arts. The degree of bachelor was conferred after completing the three courses of study mentioned above and passing a public examination in logic. For a degree of licentiate in arts, which followed in order, a year of lecturing was required, followed by a public defense of theses in the three studies, and for the third degree, that of master in arts, two years of probationary lecturing, followed by an examination covering the whole field of philosophy, were required. There were also three grades of degrees in theology corresponding to those in arts, viz, that of bachelor, licentiate, and doctor. The granting of these degrees was preceded by severe examinations held in public, and all the ceremonies were conducted with much solemnity. They were occasions of pompous processions, in which the civic authorities took a conspicuous part with the ecclesiastics and the officials of the university, in escorting the candidates to the church and back to their dwellings after the bestowal of the degrees. Even the description of the official costumes prescribed for the students and for the candidates and successful graduates, besides the clergy, on these occasions is given in detail.

The faculty of civil law was added to the university course in the eighteenth century after many difficulties, and authority to grant degrees in law was con-

ferred upon the university in 1796, in consequence of which the law faculty gradually supplanted its elder theological brother in importance and influence. There were two Jesuit "colegios," or secondary schools, connected with the university, and after the expulsion of the Jesuits by Carlos III in 1767 both the university and its colleges were given over to the secular clergy, and subsequently to the Franciscan order, in whose charge it remained until it was secularized by decree of the King in 1800. This order was not, however, carried into effect until 1808, when the university began its new career under lay auspices and with a new system of instruction which lasted during the first half of the nineteenth century. This course of instruction comprised four faculties, viz, grammar, philosophy, theology, and law. The philosophical faculty included four subdivisions, viz, (1) logic and metaphysics; (2) moral philosophy; (3) arithmetic, geometry, trigonometry, including surveying, and algebra (equations of the first degree); (4) physics, in which study it is to be noted that the experimental method was to be preferred to the systematic. The studies of theology and law followed the course in philosophy. The university maintained its aristocratic character until its "nationalization" (that is, until the national government assumed charge of it) in 1854. Up to that time purity of blood was a prerequisite to admission, and persons of mixed negro and white blood in particular were denied admission. Upon the declaration of independence in 1818 the National Government, with its seat at Buenos Aires, declared itself the successor of the Spanish Crown in respect to authority over the university, and except an interval from the disturbances of 1820, when the control was assumed by the provincial government, until 1854, when the National Government resumed authority, the university has remained under the National Government ever since. The curriculum as rearranged was quite modern in its character and consisted of a preparatory course, so called, comprising Spanish, Latin, French, religion, geography, and practical arithmetic, which was followed by the courses of the regular faculties, philosophy (logic, ethics, mathematics, physics, and astronomy, one year each), theology (four years), and law (four years). The "cyclical" character of the course in philosophy, as the author of the article here translated calls it, is criticised by him as being a vicious system by which a student is led to follow a given study (logic, or ethics, or physics, etc.) for a year and then forget it.

IV.

Education in Buenos Aires and the coast, the viceroyalty of Rio de la Plata, during the nineteenth century.—Both the Spanish population and the Spanish culture arrived at the territory which was afterwards known as the viceroyalty of Rio de la Plata in two distinct currents, one coming from Peru on the Pacific side of the continent, while the other reached the Atlantic coast directly from Europe. Only the first of these two currents was of importance as far as influence upon education is concerned during the seventeenth and eighteenth centuries. Crossing the northern part of the territory it ramified from Cordova, which city became its center, to Corrientes, Paraguay, and the boundary of Brazil. Its typical and important institutions were the University of Cordova and the missions of Paraguay.

The other stream of colonists, which came directly from Spain to the coast country (the "litoral"), was less important from the point of view of education. They were, for the most part, rough "hidalgos" and military men who had no idea of establishing schools. The few and scattered centers of instruction which were established among them were due to the northern immigrants with whom came the religious congregations and the secular clergy as

well. Later, at the end of the eighteenth century, during the reign of Carlos III, colonization from the Atlantic side increased in strength, but owing to the liberal political and religious ideas of that period, the new colonists were less under the religious influences than those who had arrived from the north. Nevertheless, the Viceroy Vertiz, who represented in Rio de la Plata the progressive politics of Carlos III, endeavored to establish a university in Buenos Aires, but although his project received the royal assent in 1778, it was not realized until much later. Meanwhile a college was established under the name of San Carlos in a building belonging to the Jesuits, in which instruction was given in grammar, rhetoric, philosophy, theology, and canon law after the old scholastic method, which was not in accordance with the new spirit of the times, and accordingly, after languishing some years, the college was suppressed definitely after the revolution of 1818. Vertiz also founded a medical school in 1780, while at the same time the nautical school and the school of geometry, in which architecture, perspective, and drawing were also taught, were established, both of which, however, came to a premature end in 1802. About this time, also, that is to say, previous to the nineteenth century, it is worthy of special historical interest to record, the revolutionary leader Belgrano^a desired to establish free primary schools besides special schools of agriculture, mathematics, and drawing, but his ideas were not then realized. The university of Buenos Aires owes its origin to the union of several struggling or moribund institutions, including those just mentioned and two or three similar colleges, which was effected in 1821. The university included in the scope of its activities the entire official instruction of the Province of Buenos Aires from the elementary schools to those of theology and jurisprudence. After the elementary schools came the department of secondary or preparatory studies, which included Latin, French, logic, metaphysics and rhetoric, physics and mathematics, and political economy. In the department of mathematics were included drawing and descriptive geometry with applications. The medical department included the three chairs of medicine, surgery, and clinics, both medical and surgical. The department of law had two chairs, one of natural law and the law of nations, and the other of civil law. The department of theology was left without specific provision until 1825, when the chairs of Greek and Latin, of evangelical morals and of ecclesiastical history and discipline, were founded. From the foregoing the practical and positive spirit in which the university was founded will be seen. The preparatory studies and the medical and law departments continued to flourish and exert a beneficial influence upon Argentine culture, while theology and mathematics did not acquire an equal importance or influence. The university languished, however, under the rule of Rozas, who even permitted the return of the Jesuits and commanded the rector of the university to admit them to their ancient seat, until his power fell in 1852, after which the university was reorganized upon a wider scale in accordance with modern ideas. The plan of the secondary studies was enlarged, the course in medicine was extended to six years, and in 1863 a faculty of exact sciences was added, besides which enlargement of the university itself the government of the province established certain national colleges of secondary instruction under the direction of the university. Since 1882 the functions of the university have been conducted under the four faculties of humanities and philosophy, of medicine, of law and social science, and of mathematics and the physico-natural sciences. Each faculty has its own teaching body and government and there is besides a superior council, under the presidency of the rector, composed of

^a Belgrano, an Italian by origin, and a man of wealth, had received his education at the university of Salamanca.

delegates from the several faculties. Since 1885, the date of the passage by the national congress of the university law which regulates both the university of Cordova and Buenos Aires, both institutions have ceased to give secondary instruction and have devoted themselves exclusively to superior studies, resembling in that respect the new university of La Plata, founded in 1906.

V.

Education in Argentina in the second half of the nineteenth century.—Since 1852 the National Government of Argentina has been actively engaged in reorganizing education throughout the country. Primary schools were established in various places, but the main efforts of the Government were directed toward improving secondary education, which was effected by establishing a number of national colegios, one in each provincial capital, each successive minister of public instruction—and there were frequent changes in the ministry between 1852 and 1884, when the present course of studies was established—having a plan of his own. Since the latter date secondary instruction is confined to one national colegio, in which the character of the instruction is modern and encyclopedic, while its ethical character is civic and democratic and the instructors are laymen. The same practical character is now given to primary instruction. Sarmiento, in his capacity as statesman and writer, turned to North America to find models for his country to follow, and in this he was followed by other patriots, conspicuous among them being Juan María Gutiérrez, in consequence of whose efforts the Argentine schools now have a marked democratic and practical stamp. The seed which those statesmen planted fell upon a rich and responsive soil and is now bearing abundant fruit.

VI.

Character of modern Argentine education.—Modern Argentine education is the result of a violent reaction against the strong religious and monarchical spirit which dominated the old régime, in education as well as in politics, and from its inception it manifested the individualistic and democratic tendencies of the philosophy of the eighteenth century. Two orders of ideas influenced the molding of the new nationality, the modern European humanistic teachings, and North American constitutionalism. The new European humanistic doctrines revealed themselves, although feebly, in the reforms of Carlos III, but acquired strength and body in the minds of the revolutionists. In spite of the prohibition by the Spanish Government of the introduction of books which would disseminate the new philosophy, the new ideas crossed the seas like the winds themselves, so that although the patriots could not find opportunities to read the original works of Montesquieu, Rousseau, and Voltaire, or the encyclopedists, the doctrines of these writers became known to them, inspired their thoughts, and determined their actions. Moreno, Monteagudo, Belgrano—all the great leaders and thinkers of the Argentine revolution—were more or less romanticists and Jacobins. After the revolution the patriots found the more typical and perfect realization of their political ideas in the North American Republic. That democratic republic, therefore, became their exemplar and a model of organization for them to copy. The ideals of a republic, of liberty, and of the rule of the sovereign people represented their highest political aspirations. American independence coincided very fortunately for their purposes with the triumph of the French Revolution.

With these elements and ideas the new nation was radically liberal and republican, and the population, although not really European by race, and not

sufficiently educated to make a proper use of republican ideas and institutions, which are difficult for novices to comprehend at first, still promptly assimilated the fundamental ideas of the new political organization, for a faculty of assimilation and a passion for progress have always been characteristic of the creole portion of the people. From the new culture could only result a democratic tendency and a profoundly practical spirit which affected education as well as politics. The scholastic spirit disappeared with the revolution, instruction ceased to be formal and abstract, and the classics were no longer cultivated with such zeal or so generally as in former years, but education followed the modern, practical tendency of the period, substituting the physico-natural sciences and modern languages for the old classical courses. The aim is no longer to produce men of erudition, but enterprising citizens.

Discipline has been and still is defective in Argentine institutions of education. There is much insubordination among the students, the explanation of which is to be found partly in the social spirit, and partly in the character of the creoles and the prevailing Jacobin ideas. But it is a mistake to complain of a fault which merely demonstrates the existence of an independent and manly spirit. When that spirit is subject to proper discipline, it will produce one of the most intelligent and generous peoples on earth.

APPENDIX II.

A BRIEF SURVEY OF EDUCATIONAL CONDITIONS IN CHILE IN 1908.

[Population, 3,399,928 in 1905.]

The last report of this bureau contained a notice of the decided tendency to utilitarian or "modern" studies in higher education which Chile, in common with the other Spanish South American States, has developed in recent years. This tendency has arisen in response to a demand for studies of a practical and positive, or objective, nature in place of the old subjective introspective culture. The modern tendency is due to the rise of the industrial democracy during the latter half of the nineteenth century, and has been conspicuous in Europe as well as in the United States and South America. Further illustration of this tendency in Chile is offered by the report of the minister of public instruction, presented to the National Congress in 1908, which gives a summary view of the condition of state education in Chile from the primary grades to the university. This order of arrangement—beginning with the lower grades and proceeding to the higher—which in itself is significant of a change of view in recent years, is followed in the present abstract.

To render his review of state-supported instruction complete, the minister remarks, it is necessary to refer to those institutions which have received subventions from the state as well as those which were founded by and are entirely supported by it.

Private instruction is powerfully aided by the annual appropriations for the different secondary schools (*liceos* and *colegios*), which have been increasing year by year until the sum amounted to \$87,235 in 1907. The mean attendance at these schools for that year was 3,957, which makes the subvention \$22.04 for each student. In like manner the subvention for private primary schools rose in ten years from \$49,490 in 1898 to \$232,286 in 1907. These private schools had an average attendance of 13,898 children of both sexes during the latter year, making \$16.71 for each pupil. Private schools are also assisted

by the State through the gratuitous distribution of text-books and paper. The minister adds that although it is well for the treasury to be open-handed in its assistance to private schools in a country where there is so much illiteracy as there is in Chile, still two considerations must be kept in view—one, that this assistance should not be so prodigal as to impede the development of the public or state schools, which have a much broader plan of studies than the private institutions, and the second, that the Government should not grant this assistance without careful examination, because, while there are schools and societies worthy of all credit, there are others, unfortunately, which do not faithfully perform their duties to the heads of families.

To insure the proper performance of their functions, the Government at the close of 1907 obtained a grant of \$109,500 as a subsidy to be paid to the pupils (at the rate of \$7.30 a year each) of such private schools as would comply with the conditions contained in an ordinance which the Government issued at the same time. Among these conditions were provisions that the hygienic surroundings of the schools must be good; that the teachers must have diplomas from the normal schools, or have bachelors' degrees in the humanities, or pass examinations; that reading, writing, elementary arithmetic, geography, and history of Chile be taught; that the schools should be in operation at least one hundred and fifty days in the year, and that they should be subject to inspection by the regular inspector of the public schools.

A table showing the growth of the state primary schools from 1891 to 1907 shows that in the latter year there were 2,319 such schools, with 3,997 teachers, an enrollment of 197,174, and a mean attendance of 121,176, or 61.4 per cent of the enrollment. The number of teachers in 1907 who were graduates from a normal school was 1,415, against 2,582 who were not "normalists," wherefore the Government determined to stimulate the zeal of those teachers who have not had a normal course by giving them facilities to study in a pedagogical seminary, and to that end issued an ordinance providing for the examination of such teachers at a normal school before an examining board for the purpose of granting diplomas as qualified teachers. The subjects prescribed for examination include methodology and manual training, with the usual subjects of study of primary schools.

Promotions in the public school service, as in all branches of the Government, should be based solely upon merit and not be due to favor. Only those normal teachers, therefore, should be appointed directors of superior schools who are proved to be worthy of the trust by their intelligence and high character and their experience in teaching.

Appointments to these places were, accordingly, made subject to competitive examination by a decree of May 25, 1908, which provides minutely for the conduct of such examinations before an examining board at some one of the state normal schools.

In recent years manual training has developed to a considerable extent in the public schools of Chile, the first 10 carpenter shops having been established in 1899, while in 1907 there were 29 carpenter shops, with 908 pupils working in them; 40 shops for working in pasteboard, with 1,270 pupils; and 51 shops for needlework, with 5,100 girls at work in them.

The Swiss method of instruction has been followed in these schools, with the view of cultivating the natural aptitude of the pupils, but a more practical end will be observed in future and the instruction will be correspondingly modified and the number of shops greatly increased. Especially is this practical object to be kept in view in the superior schools, where the pupils will be taught mechanical trades, so that they can enter into business readily.

In 1908 there were 15 normal schools for the training of teachers in Chile, 6 for men and 9 for women, and a new normal school for women was established that year in the Province of Malleco.

The following table gives the statistics of normal schools for 1907:

NORMAL SCHOOLS IN CHILE.

	For men.	For women.	Total.
Number of schools.....	6	9	15
Number of teachers.....	111	182	293
Enrollment.....	722	1,255	1,977
Average attendance.....	580	1,029	1,609
Number of graduates.....	66	54	120

PRACTICE SCHOOLS.

Enrollment.....	583	815	1,398
Average attendance.....	479	631	1,110

The Government is so sensible of the importance of the normal schools that a special decree was published under date of April 27, 1908, with reference to the appointment of teachers, in accordance wherewith "normalists" (i. e., graduates of a normal school) who have completed the course of the Pedagogical Institute and those who have studied at the Institute of Physical and Manual Training are to be preferred as teachers in normal schools, and if such candidates are not available, then those who have diplomas as teachers in normal schools or university graduates will be accepted, thus precluding the possibility of filling the positions with unqualified persons.

The plan of studies of these schools has also been modified, more reliance being placed upon the study of text-books and works of reference than heretofore when the students were accustomed to make notes of the lectures of the professors. The list of works includes the names of several French and German authors (Compayré, Schuffe, Schutzer).

Commercial education in Chile, so far as it has developed, is a growth of recent years. A list of nine commercial institutes in as many cities is given, with an average attendance of 934 students in 1907. By a decree of May 26, 1908, the following industrial course of study was prescribed for the technical commercial institute of Iquique, which prepares its students to be employees of the Government and analysts and technical experts for the saltpeter industry: English, German (elective), wood and iron working, industrial chemistry, machines and motors, electricity, and drawing—the last four subjects being studied practically in the laboratory and shops.

Secondary education.—The law of January 9, 1879, provides that there shall be at least one establishment of secondary instruction in each province; that is to say, that there should be one liceo for young men in each of the twenty-three provincial capitals. Many other liceos have since been created in different cities, until in 1907 there were 39 in the whole country, with an enrollment of 9,302 and an average attendance of 7,896; there are, besides, 31 liceos for young women, supported by the State, with an enrollment of 4,810 and an average attendance of 3,839. The courses of study in these liceos are designated in the tables as "preparatory" and the "humanities," the latter being the usual secondary course, to which the new studies of civics, psychology, philosophy of the sciences, and general history of civilization were to be added. The average attendance on the course of the humanities was 4,555 young men and 1,779 young women in 1908.

The preparatory course in the liceos for girls is of three years, and in some cases the first-year course appears to be designed for very young pupils.

Superior instruction.—Higher education in Chile is placed by law under the direction of the council of public instruction, while the University of Chile in its various establishments is the actual seat of this branch of instruction. As stated by the minister in his report, the university has not only been the fountain of instruction and learning as such, but has been the source of the progressive ideas in educational reform which have so rapidly modified the intellectual condition of the people in recent years.

The council of public instruction was for forty years, under the name of the council of the university, the principal auxiliary of the Government in all educational matters, whether relating to primary, secondary, or superior instruction. It was, however, deprived of its jurisdiction over primary instruction by the law of 1879, while its authority over the other two branches was made supreme, and during these thirty years it has accomplished a notable work. It is charged with the duty of conferring degrees and titles which qualify the students to practice professions or enter the public service, and has provided a series of examinations as a condition precedent to granting the degrees. This has been the powerful lever by means of which the council has fomented so efficaciously the intellectual development of the country. The degree of bachelor of the humanities is evidence that the student possesses all the ideas which are indispensable to a man of cultivation and a good citizen. The degree of licentiate in law or medicine or mathematics (engineering) is clear proof not only that its possessor is qualified to practice the corresponding profession, but it also implies that he knows, and knows well, other subjects of study which, although they may not be necessary in the practice of his profession, yet give him greater breadth of view and stability of principle. The council has in this way been of great service to the country directly and indirectly, and it has also contributed to the general education of the people through its own publications, such as the *Anales de la Universidad*, and by publishing other important works and granting premiums.

The faculty of law is composed of the leading judges and advocates of the Chilean bar. In 1907 the number of law students was 476. The minister of foreign relations has proposed that a course should be established in the law school for the training of young men for the diplomatic and consular service.

The medical faculty, like that of the law, is composed of the most distinguished practitioners in Santiago, and the students numbered 232 in 1907. The school of pharmacy connected with the medical faculty had an enrollment of 54 in that year, the school of dentistry 80, and the school of matrons 37.

The mathematical course of the university is on a par with those of law and medicine. Its teaching force is composed of Chilean engineers of high standing, together with some foreigners.

On September 19, 1907, the Government, upon the recommendation of the council of public instruction, created a special class for the study of the exploitation of saltpeter and analogous salts, the great importance of the saltpeter industry to Chile making that step advisable. The professor will be required to make reports to the Government upon the manufacture of fertilizers in foreign countries.

Another new chair in the mathematical course is that of seismology and seismic architecture, suggested particularly by the earthquake of 1906. The services of Prof. Montessus de Ballore were secured to fill this chair and to erect and superintend a seismological observatory.

In 1907 there were 250 students in the mathematical faculty.

There are an astronomical observatory, the museums of natural history of Santiago, Valparaiso, and Concepción, and a botanical garden, connected more or less directly with the faculty of physical sciences and mathematics.

Much space is given in the report of the minister of the pedagogical institute, which may be regarded as the teachers' section of the faculty of philosophy and humanities. This institute was created twenty years ago, and has ever since been acquiring the development and influence its founders hoped for. Its students were at first internes, but this system was soon abolished and now only externes are admitted. It has graduated 310 teachers of both sexes, and the matriculation for 1907 showed 205 names. The principal recent improvement has been the installation of cabinets and laboratories of physics, chemistry, and the biological sciences, while the plan of studies was considerably modified in the latter part of 1907. There are now seven courses, viz: (1) Spanish, (2) French, (3) English, (4) German, (5) history and geography, (6) mathematics and physics, (7) biological sciences, chemistry, and mineralogy. All students of the institute are required to study (1) theoretical and practical pedagogy, (2) experimental psychology, (3) logic, ethics, and the history of philosophical systems, and (4) civics and elements of school legislation. A list of the studies prescribed for one of the courses, that in Spanish, will give an idea of those in the four others in languages, as they are practically identical, excepting the language which gives the name of the course.

Course in Spanish: Style and composition, Spanish linguistics, Latin, some foreign language (French, German, or English), theoretical pedagogy, psychology, logic and ethics, history of philosophical systems, civics.

An idea of the scope of the instruction in the foregoing may be obtained from one subject, viz, Spanish literature. This is divided into three heads: (1) Latin, anteclassical and classical literature of Spain. (2) Contemporary literature. (3) History of Spanish-American literature, colonial and post-revolutionary.

The other subjects are similarly treated, and examination topics corresponding to and fully covering each general subject are given.

Under chemistry and mineralogy are included the theoretical and experimental study of general chemistry; inorganic chemistry, with qualitative and quantitative mineral analysis, including volumetric analysis; organic chemistry, theoretical and descriptive, preparation of organic compounds, including synthesis, elementary organic analysis and determination of formulas, application of analysis to foods, drinks, and industrial products; crystallography, geometrical and physical, with goniometry, general and descriptive mineralogy, the principal mineral species, determination of minerals and blow-pipe assay; petrography, the most important rocks and their origin, preparation of thin sections, and determination by means of the microscope.

The foregoing shows a very comprehensive course in chemistry and mineralogy, including petrography, sufficient, it would seem, to give a student ample knowledge not only to teach the subject intelligently, but also to enable him to pursue the study by himself.

Systematic pedagogy includes, (A) theoretical part. Under this come, (1) the study of the pupil: (a) the fundamental laws of psychological life, psychology, and paidology; (b) the ideal forms of psychical life, ethics, logic. (2) The study of the educator, which includes (a) general methodology of education, especially secondary; (b) special didactics of the different subjects taught in secondary schools. (B) The practical part: (1) Psychological investigations in the laboratory; (2) attendance at the practice school, practice recitations and criticism.

The Spanish-American countries, following the Latin traditions, maintain schools of art and music as public institutions supported by the State. The studies of the schools of fine arts in Chile include painting, drawing, sculpture, engraving, and architecture, and the teachers are often European artists who have received prizes for their work in Paris or Spain. There were 243 pupils of both sexes at the two schools of fine and decorative art in 1907, and 144 male and 439 female students at the national conservatory of music. This institution is of great benefit to the middle class of the population, since the greater part of its graduates become teachers of the piano and singing, and are trained to become actors and actresses.

CHAPTER VIII.

EDUCATION IN GREAT BRITAIN AND IRELAND.

Great Britain and Ireland, constitutional monarchy; area, England and Wales, 58,324 square miles; population, 35,348,780 in 1908. Scotland, 30,405 square miles; population (estimated, 1908), 4,826,587. Ireland, 32,360 square miles; population (estimated, 1908), 4,363,351.

TOPICAL OUTLINE.

Statistical summary, Table 1 and context, pertaining to the three divisions of the Kingdom.

CURRENT RECORD OF EDUCATION IN ENGLAND.

Legislative measures.—Fate of the education bills of 1908; the "Children act" providing for the care and protection of children, and the establishment of special courts for juvenile offenders.

Investigations pertaining to exemptions from school attendance, and compulsory attendance at continuation schools.

Administrative activities.—Scope of central and local authorities. Difficulties arising from the dual school system; the Swansea case; passive resistance; Mr. Runciman on the situation; decline in nonprovided (denominational) schools. Demand for smaller areas of local administration; movement for promoting rural education.

Measures affecting teachers.—Staffing of elementary schools; recent changes in training colleges for teachers.

Extension of system of public education; social welfare services; scholastic extensions. Discussions of curricula.

Expenditures for education.—Sources of support; complaint of the local burden.

Statistics, current and comparative, Tables 2-9.

Recent investigations.—Report of the interdepartmental committee on partial exemption from school attendance; report of the consultative committee on attendance, compulsory or otherwise, at continuation schools; educational bearings of the reports of the poor-law commission, and the royal commission on the care and control of the feeble-minded.

Partial list of recent publications of the board of education.

EDUCATION IN SCOTLAND.

The education (Scotland) act, 1908. Current record. Statistics, Tables 10-14.

EDUCATION IN IRELAND.

Activities promoted by the Irish universities law, 1908. Need of coordination of the agencies for public education. Advantages of coordination in the province of technical education. Stimulating influence of the Dublin meeting of the British association, 1908. Statistical summary of elementary schools, Tables 15-19.

STATISTICAL SUMMARY.

Table 1 shows the attendance at universities and university colleges and at public (state-aided) elementary schools of Great Britain and Ireland according to the latest official reports. The entire field of

secondary education is omitted from the table, complete statistics pertaining to this department of education not being attainable. It should be observed that the term "secondary" has different applications in the three divisions of the Kingdom. In England secondary schools are not a link between public elementary schools and higher institutions. They offer a distinct course of education, parallel in a sense to the elementary school but extending far beyond it. This is, in a measure, true also of the intermediate (secondary) schools of Ireland. In Scotland the secondary school, as a rule, is continuous with the elementary school, and keeps an open course from the latter to the university. As a consequence of the recent extension of government aid and supervision to secondary education and the closely allied province of technical education, common purposes and endeavors are developing in this department throughout the Kingdom. The first step in the new field was necessarily that of an inventory of present conditions, and thus information as to the number and character of secondary schools and technical institutions is rapidly increasing in volume and accuracy. Summaries pertaining to the former are given in the series of tables at the close of this chapter.

Elementary education is organized under government direction in the three divisions of the United Kingdom, and the magnitude of this work is indicated, in a measure, by the enrollment in elementary schools, as given in Table 1. In England and Wales the enrollment is equivalent to 17 per cent of the population, in Scotland to 17 per cent, and in Ireland to 16.5 per cent. Comparison of the number of students in universities and university colleges in each division of the Kingdom (so far as tabulated) with the corresponding populations shows, for England, 1 student for every 1,291 inhabitants; Scotland, 1 for every 604 inhabitants; and Ireland, 1 for every 1,935 inhabitants.

The extension of government aid to "higher education" has increased the annual appropriations by Parliament for this service. The total amount voted for education, science, and art in the three divisions of the Kingdom for the year ending March 31, 1909, was £17,685,886 (equivalent to \$86,059,521). The estimate for the year ending March 31, 1910, is £17,911,143 (equivalent to \$87,155,622). Omitting the grants for science and art, and the grants for universities and colleges in England and Wales (the latter amounting in 1908 to £221,800 and in 1909 to £217,400), the grants administered by the education departments in 1908-9 were as follows: England, £13,587,806 (\$66,118,264); Scotland, £2,048,557 (\$9,968,278); Ireland, £1,544,818 (\$7,517,084). The corresponding estimates for 1909-10 are, England, £13,648,792 (\$66,415,022); Scotland, £2,147,541 (\$10,-

449,934); Ireland, £1,621,921 (\$7,892,267). Elementary education absorbs by far the larger part of these funds—in England, about 85 per cent; in Scotland, 94 per cent. In Ireland the annual parliamentary grant meets practically the entire expenditure for the national schools.

TABLE 1.—*Summary of current educational statistics—Great Britain and Ireland.*

[The information in this table relating to universities is taken from the Statesman's Year-Book, 1909, and from current calendars of the institutions. The remainder has been compiled from the official reports of the education departments of the different divisions of the Kingdom.]

Institutions.	Date of report.	Registered students or pupils.	Professors or teachers.
ENGLAND AND WALES.			
Universities and colleges:			
Oxford (21 colleges, 4 halls, and noncollegiate students)	1908	3, 813	.....
Cambridge (17 colleges, 1 hall, and noncollegiate students)	1908	3, 589	.....
Durham (1 college of arts, 1 college of science, 1 medical college) ^a	1908	978	.....
London (29 colleges and schools) ^b	1908	8, 062	.....
Victoria University, Manchester (2 colleges) ^c	1908	1, 446	242
Leeds University ^d	1908	900	133
Liverpool University ^e	1908	914	317
Sheffield University ^f	1908	734	137
Birmingham University	1908	910	113
University of Wales (3 colleges)	1908	1, 584	161
University colleges (5) ^g	1908	1, 998	257
University colleges for women (4)	1908	485	.....
Elementary day schools	1907	5, 968, 120	176, 961
Training colleges for elementary teachers	1907	6, 165	.....
SCOTLAND.			
Universities and colleges:			
St. Andrews University (3 colleges)	1908	562	87
Aberdeen University	1908	905	79
Edinburgh University	1908	3, 328	153
Glasgow University	1908	2, 650	145
Glasgow Technical College	1907	548	.....
Elementary day schools	1908	812, 346	23, 264
Training colleges and centers for elementary teachers	1908	3, 320	.....
IRELAND.			
Universities and University colleges:			
Dublin University	1908	1, 241	93
Belfast, Queen's College ^h	1908	407	53
Cork, Queen's College ⁱ	1908	254	27
Galway, Queen's College ^j	1908	112	129
University College, Dublin	1907	240	.....
Elementary day schools	1907	732, 460	14, 834
Training schools for elementary teachers	1907	1, 953	.....

^a Also 1,000 evening students.

^b Not including evening students.

^c Also 164 evening students.

^d Also 214 evening students.

^e Also 274 evening students.

^f Also 1,500 evening students.

^g Also 3,698 evening students.

^h By the Irish universities act, 1908, this college has been raised to the rank of a university, i. e., the Queen's University, Belfast.

ⁱ This college has become a constituent college of the new university of Ireland at Dublin.

^j In 1906.

For a review of current educational movements each division of the United Kingdom must be separately considered.

EDUCATION IN ENGLAND.

LEGISLATIVE MEASURES.

The year has been marked in England by discussions and activities growing out of legislative measures, the course of which was interrupted by the adjournment of Parliament for the long vacation (August 1).^a Early in the fall term the education bill introduced by Mr. McKenna was withdrawn in view of the impossibility of securing the agreement of both houses upon its main provisions. This, it will be recalled, was the second measure submitted by the Liberal government since its accession to power, as the result of the election of 1905, having for its purpose the placing of all the public elementary schools of England under the control of public authorities.^b A substitute measure, the outcome of the conferences of the education settlement committee, was introduced (November 20, 1908) by Mr. Runciman, who had succeeded Mr. McKenna as president of the board of education. This bill authorized denominational instruction in council schools (schools established by local authorities) under certain restrictions, in return for the exclusion of all voluntary schools from a share in the local taxes. Voluntary schools were allowed to continue with aid from parliamentary grants under the conditions determined by the education act of 1870.^c The bill proved utterly futile as a means of satisfying the opposing interests of public and parochial school, and after a fortnight was speedily abandoned. Thus terminated the efforts to annul or modify the provisions of the education act of 1902, which remains in full force.

The children act, which was passed soon after the reassembling of Parliament and received royal sanction December 21, 1908, went into effect the 1st of April, current year. Although not strictly an educational measure, it deals with matters closely related to the latter interest. While the main purpose of the new law is to bring into one well-ordered statute previous enactments on the same subject, it also improves and extends the provision of former laws for the care and control of the child population. It therefore increases the responsibilities of all authorities that are charged with these duties. Among these are the executive officers of local education departments, their legal and medical advisers, school-attendance officers, and even teachers themselves.

^a The previous report of this series was sent to press in October, 1908; consequently the present review relates to the twelve months ending October 1, 1909.

^b For the provisions of the McKenna bill, see Report of the Commissioner of Education for 1908, Vol. I, chap. 6, pp. 175 et seq.

^c For full text of this measure, see School Government Chronicle and Education Authorities Gazette, No. 1972, Vol. LXXXI (Nov. 28, 1908), pp. 444-447.

The most important of the new provisions comprised in the children act pertains to the treatment of juvenile offenders. The institution of separate courts for children's cases is required throughout the country, following thus the lead of several English towns, notably Birmingham.

The law forbids the imprisonment of any child under 14 years of age, or of any person between the ages of 14 and 16, unless the latter is proved to be so depraved or unruly that he can not safely be cared for in a house of detention. It also prohibits the commitment of a child under 12 years of age to a reformatory school.

The provisions referred to, which deal in a comprehensive manner with the whole matter of juvenile offenders, affect the cases of truant children. These have often been allowed to pass unnoticed by judicious and human officials on account of their reluctance to bring such children into contact with the criminal courts.

As a consequence of the discussions excited by the school-attendance bill, which was introduced by Lord Stanley, of Alderley, but failed to pass to second reading, an interdepartmental committee was appointed in July, 1908, to inquire into the conditions of partial exemption from school attendance throughout the country. The report of this committee, submitted in August of the present year, will be considered farther on. It suffices to say here that the committee agree in an unqualified condemnation of the half-time system and in recommendations looking to its speedy abolition.

Intimately related to the investigations above referred to is that of the consultative committee of the board of education on "Attendance compulsory or otherwise at continuation schools." This investigation was prompted in part by the general agitation of the subject of the unemployed in England and the constant increase in their ranks from youths unprepared for definite vocations or for skilled labor. As an immediate reason for such an investigation reference is made in the instructions to the committee to the provision of the education law for Scotland, 1908, authorizing local school boards to require the attendance of children at continuation classes or schools under specified conditions.

The report of the consultative committee is an important contribution to the rapidly accumulating information on labor problems and their relation to education. As will be seen from subsequent citations, it confirms many of the opinions and recommendations of the interdepartmental committee.

ADMINISTRATIVE ACTIVITIES.

The failure of the legislative measures proposed by the Liberal party is offset in various ways by the action of the board of education and the county and county borough councils, which together

control the public funds for the maintenance of schools. The board of education administers the parliamentary grants for education and, subject to the approval of Parliament, determines the conditions on which schools and higher institutions shall share in the funds. It has become, therefore, a directive and unifying force in elementary education, and is rapidly assuming a similar relation to secondary and technical education. This influence is exercised by the service of inspection, by the reports of special inquiries, and by educational pamphlets issued from time to time on subjects of timely interest or pressing importance. The board also has certain advisory and judicial functions. The scope of the supervisory powers of the board as extended by the education act of 1902 is indicated by Table 2 in the statistical summaries appended to this general statement.

The local authorities for education, recognized by the law of 1902, include at present 62 county councils, 74 county boroughs, 137 autonomous municipal boroughs, 54 urban districts, and the Isles of Scilly; total, 328. The county and borough councils exercise their powers with respect to the schools in their respective areas through education committees, excepting those relating to the expenditure of money. In respect to finances the councils are supreme and their powers can not be delegated. The councils disburse the parliamentary grant in their several areas and determine the amount of local taxes annually required to meet the additional expenditures for education. The latter represent levies varying from 1.5d. to 27.1d. in the pound sterling. The extent of these local jurisdictions is indicated by Table 3, showing the distribution of scholars among the different classes of areas.

The schools and higher institutions under the supervision of public authorities are classed in the education act of 1902 under two heads: Elementary education and higher education. To the first of these classes belong the public elementary schools which are supported by parliamentary grants and local taxes. These are either provided, that is, established by the public authority, or nonprovided; the latter being chiefly parochial.

ADMINISTRATIVE DIFFICULTIES OF THE DUAL SYSTEM OF SCHOOLS.

In 1903-4 the nonprovided schools enrolled 50.8 per cent of the children in public elementary schools; for the year ending August 1, 1907, they had an average enrollment equivalent to 45.7 per cent of the total. The decline is due, in great part, to the superiority of provided schools in the great municipalities; it has been accelerated, however, by opposition to the use of local taxes for the support of parochial schools. The opposition of the Welsh councils to this provision of the law of 1902, "the Welsh revolt," as it is termed, reached a crisis during the year under review in the case of the Swansea bor-

ough council in respect to a Church of England school within the area. The managers of the school charged that the local authority discriminated between teachers in that school and those in the provided schools by the lower scale of salaries allowed in the case of the former. The charge was not denied; but on their part the borough council contend that their control of expenditure is "itself uncontrolled and uncontrollable."

Upon an appeal to the board of education, the action of the local authorities was sustained. The case was then carried into the court of king's bench, where judgment was given against the decision of the board of education. Notice of appeal was immediately entered, at which point the case now rests.

The School Government Chronicle, in an editorial on the judgment of the court, says:

Whatever may be the ultimate decision in the great Swansea case, it can hardly be displaced from its rank as the most important of all the more or less well-remembered decisions of the courts for which the education act of 1902 has given occasion. Notice of appeal was entered immediately after delivery of the decision of the lord chief justice and the two other learned judges associated with him in the hearing of the arguments last week in the court of king's bench. And there is every likelihood that we shall have to wait not only for judgment of the court of appeal, but for the review of that judgment—whatever it may be—according to the larger outlook which the House of Lords, in its high judicial capacity, is enabled to take upon issues of law, before we shall have it for a certain fact that the effect of the act is, or is not, as the three judges have for the time being defined it. Yet the judgment now before us, whether it be upheld, reversed, or only modified in the ultimate stage of appeal, runs no risk of mere futility. In any event and at the least it contributes more than any other legal incident of the six years or so, during which the act has been operative, to demonstration of the instability of some of the most distinctive features of that statute.^a

The continued opposition of English Nonconformists to the settlement of 1902 is indicated by the revival of passive resistance. Measures have been taken during the year to organize this movement and federate "passive resisters" throughout the country. The significance of this opposition is indicated in a public address by Mr. Runciman on the "Education question." Referring to the rejection of the compromise bill which he submitted to Parliament, he said in substance:

They would have had one great national system had the bill gone through; but they made exceptions for those religious communities which could not in harmony with their faith and practice come into the general system; they made exceptions in the case of the Roman Catholics, and of those English churchmen who were like unto them. No proposal more distasteful to Nonconformists was ever made than the right of entry, and unfortunately English churchmen so little knew the Nonconformist point of view or the Nonconformist temper

^a School Government Chronicle, Vol. LXXXII, No. 2008 (Aug. 7 1909), p. 112.

that they never realized the sacrifice they made in order to arrive at a peaceful conclusion. "That handsome offer was rejected. I doubt very much whether it will ever be made again. We have fought right of entry in the past because we considered it a sheer act of aggression with no compensation on the other side. I made my appeal then—an appeal which I hope is not to be ended with the events of last autumn, although I for one will not set my hand to a similar measure—but I make my appeal to churchmen and Nonconformists to take a broad view. This world is not so good that we can afford to dissipate religious forces by mere squabbles and quarrels. The church may sooner or later have to give up some privileges in order to obtain a settlement, but for her the sacrifice will be well worth while." Things must now take their natural course; and he would remind them what the natural course was. Council schools were every day increasing; denominational schools were every day decreasing. From 1906 to 1908 in the council schools the increase had been 246,000 children in accommodation and 125,000 in average attendance. In the denominational schools in the same period there was a decrease of 205,000 in accommodation and 147,000 in attendance. That showed the natural tendency of events. Then churchmen would do well to keep in mind the fact that there was such a thing as the onward march of local government. The local government bodies were not going to tolerate the present state of things for ever. They would insist on the schools being kept in good repair. They would do what they could to avoid friction as to the appointment of teachers. They would not tolerate one-third of the managers alone being representatives of the public bodies, and those who thought they had ended the education fight by bringing about the withdrawal of the bill last autumn were mightily mistaken. Whatever happened, natural public events would fight against the denominationists. Public bodies had the whole force of public opinion on their side, and he ventured to say that, without vindictive administration, they would find before this Government went out of power, the denominationists would be in a weaker position than ever they were before. He said "without any vindictive administration." He wished to impress that upon them, because he would not be a party to any vindictive administration whatever. "While I am at the education office, I shall endeavor to be just, not vindictive. My first consideration is the child; my second consideration is the teacher." The negotiations, however, were not all lost labor. They got a new and better atmosphere. He believed the day was now near when our own obstinate, ferocious polemics would be shrivelled up and forgotten in the ambition to excel untrammelled in the instruction of the young.^a

It may be noted in this connection that in the exercise of the power conferred upon them by the act of 1902 to require that the managers of a voluntary school shall keep the buildings and equipments of the school up to a certain standard, local authorities have gone far in the elimination of inferior schools from the list of those recognized as efficient.

DEMAND FOR SMALLER AREAS FOR LOCAL ADMINISTRATION.

Apart from the inherent difficulties arising from the dual system of schools, the pressing problem of school administration in England is that of the local area.

^a School Government Chronicle, Vol. LXXXI, No. 1983 (Feb. 13, 1909), p. 171.

Since the passage of the act of 1902, experience has shown that while the county is the desirable area for certain purposes, much has been lost by the abolition of smaller areas for the direct control of elementary schools. The general recognition of the need of reform at this point is indicated by the fact that the delegation clause of the defeated education bill of 1906 received the assent of the House of Lords as it went from the Commons. The clause was reproduced as a separate bill in the present session, but on account of the pressure of other matters it was dropped at the end of the session.

The need of reform in this particular was the chief topic of discussion in the annual meeting of the National Education Association, which adopted without dissent the following resolution:

That in view of the acknowledged need to secure greater local interest and real popular control in educational affairs we consider that reforms in the system of local administration are urgently needed, especially in the direction of securing the direct popular election of local authorities having only educational duties to perform.

The author of the resolution, Mr. Gordon Harvey, drew graphic contrast between conditions under the former school board and present conditions in his own community. He said, in substance, that—

he was chairman of a school board which had some 2,000 children under its care, and they carried on the education of the district for nine years, and carried it on well. Those were delightful days for the education administrator. They were popularly elected; they knew their people, and the people knew them. They knew their teachers, and they knew the individual children under their care. Their meetings were held in the afternoon at the very doors of the representatives of the people, and all classes were consequently able to take their part and their share in the local administration of education. They had their press reports, and the public were constantly interested in, and very often properly critical of their deeds. Their school authority was the center of educational life in that little district. They had their extension lectures and their Gilchrist lectures, and they administered education with a special knowledge of the local requirements of the district, and every three years they came out to the field of battle and got into close touch with their constituents through an electoral campaign. In 1902 all this work was taken out of their hands and given to the great widespread authority of the county council of Lancashire. Now, he knew what a difference that made. He knew that the county council of Lancashire tried to do its best in the difficult task it had been called upon to perform. He knew that all the more because he was chairman of the Lancashire elementary education committee, which took over the work. The only way in which they could do that work was by doing something outside the law, and cooperating no fewer than 1,000 persons up and down the county to help them in their task; but the center of education zeal in Lancashire, if he might use such a term, became 40 miles away from its home, and all local interest in the varying localities of the county in education was gone. He was only telling them a familiar story, but what were they to do to get back what they had lost? They could not get rid of the county councils, and he for one would admit that some advantage had come to education through

the county councils. At any rate, they had raised up to something like a decent level some of the more backward districts in the county. But he did not think for a moment that the county council was fit to be more than the compelling power behind local authorities. He did not think they ought to take up any questions except those of the very widest and most general interest. They must get back into close touch with the parents of the children who used their school. They must regain the education enthusiasts of the locality to assist them in their task. He thought they ought to insist upon popular election of local representatives; and also upon having the power to levy a local rate if the enthusiasm of the district was such that the people were willing to submit to a greater rate than that which prevailed over the entire country. He had no feeling of worship for the uniform rate if he could do better by differential rating. He did maintain that what was happening now was that they had lost education zeal; education was becoming bureaucratic and official, and although certain districts may have been leveled up, yet the better and more enthusiastic districts had been leveled down. It was with the view of regaining the position they had lost, and for the objects which he had ventured to state, that he recommended the resolution for their acceptance.^a

Lord Stanley, of Alderley, speaking on the resolution, said:

There were two things in this question before them. They wanted the direct association of the people by their own representatives, and they wanted to secure the continuance of the readmission of the small people of the country. * * * He viewed with dismay the apparent ignorant acquiescence of the newspapers to the reform of the poor law, and how they seemed to think it the right thing to center the whole of this administration into great areas like counties, and to throw this special burden upon already overburdened bodies which had already very difficult duties to perform. Every institution was capable of reform, the school boards were capable of reform, but there was a vast difference between reforming and putting life into an organization and superseding it by piling its duties in a mechanical way on some other body because it happened to be handy. He could not say how strongly he felt on the matters dealt with in that resolution, and as to the reasonable alteration of the area. He was talking of elementary education because he quite recognized that in secondary education they did require a larger area than for elementary. In elementary education they wanted the direct association of the people themselves, and a recognition, as had been pointed out, of the various aptitudes and preferences and enthusiasms of those who were willing to give a part of their time to the public service. He felt that the resolution in more ways than one was the most important of their resolutions, because they had through good and evil report kept this ideal to themselves of the direct association of the people with the management of their own affairs, and therefore the keeping of such areas as would insure that. How did they suppose that the farmer, or village shopkeeper, or dissenting minister, or local clergyman, or any other men like them, living in little towns and villages in Devonshire found time to go to Exeter for the business of education? In counties not so large as Devonshire, owing to bad railway facilities, a visit to the county town to do business meant staying the night, and it was absolutely essential, if they were not going to have local government in the hands of those who had absolute leisure, like the class who formerly constituted the old courts of quarter sessions, that they should have areas of moderate size. Of course, gentlemen who lived in the county and were willing to serve should

^a Cited from *School Government Chronicle*, Vol. LXXXI, No. 1985 (Feb. 27, 1909), pp. 210-211.

have the opportunity. They were men of good education, who were accustomed to responsibilities in connection with their own estates, and they gave a good lead to the others. But they should come in by popular election, and by this means they would get a beautiful mixture of all social classes in the work. If, however, they fell back on the country for everything, they destroyed local life. He quite thought it might have gone so far that they would have to keep the county council in existence as a supervising and disciplining power, but he was quite sure that for the daily work of elementary education they must put the principal and the real responsibility upon smaller locally elected assemblies. They would never get any better organization of education until they got unity of control of the school. When they made education as thoroughly a matter of public responsibility and public concern as they made their other local municipal functions, then they would be able to bring the good will and cooperation of all the earnest people of the country to their work of development and make progress. He was not so much afraid of the question of cost when people felt that they were really managing their own affairs. Those schools in west Canada were maintained almost entirely out of the local rates. When people felt that a thing really belonged to them it did not take them very long before they determined out of their own pockets to have a good thing for themselves, but who cared in the case of counties like Lancashire or Yorkshire, where an official came round to have his papers filled up, and so on. He felt that if they did nothing more than pass that resolution they would do a good afternoon's work.^a

MOVEMENT FOR PROMOTING RURAL EDUCATION.

The discussion of the question of local administration indirectly illustrates the distinction between urban and rural conditions. While urban districts are, in the main, sufficient to themselves, rural districts require help and stimulus from without. The county councils have manifested special interest in the problems of rural education, and during the year an important conference on the subject was held in London, called together by the County Councils Association, acting in conjunction with the Central Land Association, the Central Chamber of Agriculture, and the Farmers' Club.

The reasons for calling the conference, as stated by the chairman, were—

First, the strong feeling that existed that the present curriculum was not sufficiently adapted to present-day needs; secondly, last year's report of the departmental committee on agricultural education; thirdly, the widespread feeling that the board of education and the board of agriculture were not in sufficiently close working; and, fourthly, the need for larger grants.

The problems discussed and the conclusions of the conference respecting them are indicated by the following resolutions, the first of which was referred to a special committee and the remainder adopted:

1. That the attention of local education authorities should be directed to securing in elementary schools in rural districts better instruction in rural

^a Cited from *School Government Chronicle*, Vol. LXXXI, No. 1985 (Feb. 27, 1909), pp. 211, 212.

subjects and adaptation of the teaching generally to the circumstances of country life. That in order to facilitate these objects, school gardens and equipment for manual instruction should be provided and elementary-school teachers should be trained so as to be more capable of giving the special instruction required.

2. That it is desirable to continue the education of boys who have shown aptitude for agricultural pursuits by means of scholarships tenable at suitable secondary and continuation schools. That in such schools nature study and elementary science teaching of a practical character should be given in close connection with practical work in school gardens and workshops, and the knowledge thus acquired should be made applicable to the agricultural industry. That more trained teachers capable of giving instruction in rural subjects are needed and should be provided by the local-education authorities.

3. That each group of counties should be connected with an agricultural college or institute equipped with an efficient staff and apparatus for giving the higher forms of agricultural instruction, both practical and scientific. That the local education authorities should provide scholarships for continuing the education of young men from the secondary school at such institutions. That a portion of the staff of the institution should be available for peripatetic instruction in the adjoining counties. That the institution should be supported by contributions from the counties as well as from the central department, and that experimental farms and stations should be maintained in connection with each college or institute.

4. That local education authorities should provide technical instruction for young farmers and agricultural laborers of the age of 16 and upward in winter courses or periodical classes at convenient centers in, among others, the following processes of agriculture: Dairying, thatching, hedging, draining, walling, cider making, fruit culture, poultry and bee keeping, and also in the following among other subjects: The nature of soils and manures, the characteristics and diseases of farm animals, insects, and other pests, surveying and measuring, and farriery. That the local agricultural societies should cooperate in this work.

5. That it is desirable that the central supervision of agricultural education should be intrusted to the board of education and the board of agriculture, the former being responsible for elementary, secondary, and continuation schools, and the latter for instruction of a specially agricultural character; but that in order to secure proper coordination between the work of the two departments, all questions of common interest concerning rural education, including the allocation of funds, should be referred to and considered by an interdepartmental committee, which shall report to each board, and that such committee should have power to call into consultation agricultural and educational experts outside the two departments.

6. That the local administration of rural education should be intrusted to the county education authorities, acting through or after consultation with a special agricultural committee or a subcommittee of the education committee in each county, including representatives of the local agricultural societies and of any institutions for higher agricultural education connected with the county.

7. That in order to improve our present system of agricultural instruction, largely increased funds should be appropriated by Parliament, and should be allocated on the recommendation of the interdepartmental committee, regard being had to the work done in the various institutions and the amount of local funds forthcoming from the several counties and districts.

The representative character of the conference gives great significance to the scheme of agricultural education and the system of administration outlined in the foregoing resolutions. They indicate also the character of the agencies already at work in England in this particular field.

The interest of the local authorities in the special needs of rural schools has been seconded or stimulated by the board of education, which has recently issued several important publications on the subject.^a In their report for 1907-8 the board states that the tendency to adapt rural education to the needs of rural life is a growing one. As illustrating the bearing of this tendency they cite the example of Lindsey, one of the eastern counties where a rural education sub-committee has been appointed to advise on the subject. The report says:

In this district the demand for small holdings under the recent act has been active, and it is satisfactory that the authority should have recognized in this way the important place that must be given to education preparatory to rural life if small holdings are to be successful.

MEASURES AFFECTING TEACHERS.

THE STAFFING OF ELEMENTARY SCHOOLS.

The direct control of elementary schools in England is intrusted to boards of managers. The law of 1902 requires that—

the managers of the school shall carry out any directions of the local education authority as to the secular instruction to be given in the school, including any directions with respect to the number and educational qualifications of the teachers to be employed for such instruction, and for the dismissal of any teacher on educational grounds, and if the managers fail to carry out any such direction the local education authority shall, in addition to their other powers, have the power themselves to carry out the direction in question as if they were the managers.

The local authorities are, in turn, limited in the matter by the requirements of the board of education. These relate to the professional qualifications and to the proportion of teachers of each specified class to the number of pupils in the school. During the present year changes have been made in the requirements of the board, looking to the reduction of the number of scholars for which teachers will count upon the staff, the reduction of the size of classes and the elevation of the standards of the service.^b

The following statement shows the most important modifications of the former regulations and also the classes of teachers recognized in the school staff.

^a See list of recent publications by board of education, p. 393.

^b The new requirements were issued in the form of a circular (709) and subsequently embodied in the code of regulations for public elementary schools, 1909.

Minimum requirements in respect to school staff.

Class of teachers.	Number of children in average attendance.	
	1909.	1908.
Head teacher.....	35	50
Each assistant teacher (certificated or having equivalent preparation).....	60	60
Each assistant teacher (uncertificated).....	35	45
Each student teacher.....	20	45
Each supplementary teacher.....	20	30
Each provisional assistant teacher ^a	20	30
Each pupil-teacher ^b	0	15

^a Provisional assistant teachers will not be recognized after July 31, 1910.

^b Pupil-teachers ceased to be recognized July 31, 1909.

It is further set forth in the circular that—

no organization of a school will be permitted, even temporarily, under which all the classes contain as many as 60 children, and the size of the upper classes, in particular, should be graded from 50 to 45, or 40 children, respectively. Moreover, no organization of the school will be permitted under which a greater number of children is assigned to any teacher than his personal attainments and experience qualify him to teach, and for this purpose the organization of the school in respect of "the qualification of each member of the staff and his suitability for the work assigned to him" will receive special attention from the board and their inspectors.

The new arrangements have excited some opposition, both on the ground of their interference with the organization of schools and the increased expenditure which they necessitate. But, on the other hand, they are heartily supported by teachers and school officers in all progressive communities. Mr. Runciman, referring to the matter in his speech on the budget estimates for 1910, made the following statement:

The standard which I have set up is not a fantastic standard evolved out of my head or created by educational enthusiasts, but it is a standard which is surpassed by many of the educational authorities in this country. * * * The good authorities have set an excellent example, and in particular I may name the county authorities of Wales. They set an excellent example, and previous to the circular they realized that they must have the best teachers and the smallest number in the classes if the schools were to be worth the enthusiasm expended on them. In Wales, I believe, there is only one, or there may possibly be two, counties which fall below this standard.^a

RECENT CHANGES IN TRAINING COLLEGES FOR TEACHERS.

Training colleges for teachers, or normal schools, were established by private societies in England a half century before the passage of the education act of 1870, and as early as 1843 they received government grants. These private, residential colleges, which are

^a School Government Chronicle, Vol. LXXXII, No. 2006 (July 24, 1909), p. 79.

with few exceptions denominational, are still the main provision for training teachers. In 1890 the Government agreed to recognize day training colleges, which were a logical outcome of the establishment of elementary schools under public auspices, and which, for the same reasons, were undenominational. In 1904 a parliamentary grant equivalent to 25 per cent of the total cost was offered toward the building of local authority training colleges. This year it is proposed to raise this grant to 75 per cent of the cost, or to provide 75 per cent of the current expenditure to local authorities who themselves bear the initial cost of training colleges.

While provision has been made for increasing the number of training colleges, measures have been taken to break up the denominational restrictions of the older residential colleges. As will be seen by reference to Table 6, 33 out of a total of 74 colleges belong to the Church of England, and these comprise 38 per cent of the total accommodation in institutions of this class. Until recently admission to the church schools was limited to members of the denomination. The regulations for 1908 provided that training colleges in receipt of public grants should give access to half their places without denominational tests. The condition was renewed for the current year. In future no new training college can be established unless it is free from denominational instructions. According to the latest estimates this action secures about 9,000 places for free competition on a total of 12,000.

The regulations for the current year included a clause making religious instruction compulsory in all training colleges. Public announcement of the withdrawal of this clause was made within a fortnight from its publication. In explanation of this sudden reversal of official action, Mr. Runciman said:

I quite recognize that it is very difficult to fly in the face of public opinion, and I am not prepared to add to the trouble which already surrounds my office if I can avoid it. * * * I have therefore decided not to put the regulations into operation.

It is interesting to note that among the many grounds of opposition to the clause, the one which counted most toward the final result was the objection of local authorities to having the obligation forced upon them.^a

EXTENSION OF THE SYSTEM OF STATE-AIDED EDUCATION.

The measures thus far considered relate particularly to elementary schools. But the year has been marked, also, by continued activity in respect to duties arising from the recent extension of the system

^a For an account of teachers' training colleges in England and Wales in 1907, see paper by W. A. Baldwin, principal of the Hyannis (Mass.) State Normal School, p. 525.

of education. These extensions are both social and scholastic in their nature. To the former belong measures for promoting the physical well-being of children in order that they may be able to benefit by the free instruction provided. By an act of 1906, which went into effect July 31, 1908, local authorities, with the approval of the board of education, may supply food to necessitous school children at the expense of the local taxes. During the year 51 authorities have availed themselves of this privilege.

Medical inspection of schools was provided for by the education (administrative provisions) act of 1907, which became effective January 1, 1908. Several important circulars have been issued by the board of education for the guidance of local authorities in this matter, and the service, which hitherto has been limited to the chief cities of England, is now being rapidly organized throughout the country.

Open-air schools for children physically infirm have been provided by the education authorities of London, Bradford, Norwich, and a few other boroughs, and have been recognized for government grants under the provisions of the education act for defective and epileptic children, 1899.

SCHOLASTIC EXTENSION OF THE SYSTEM.

The provisions of the law of 1902 with regard to "higher education" have entailed a vast preliminary work of investigation and advice from which definite policies are gradually taking shape. The chief responsibility in this matter rests with the local authorities. They determine the needs of their respective areas and levy local taxes for a large part of the funds to meet these needs. But in order to obtain government aid, they must comply with specified conditions and hence the classification of institutions and their scholastic standards are largely determined by the board of education.^a It is the present purpose of the board as stated by the president, Mr. Runci-

man—to generalize secondary education, and so far as it comes under the control of the board to make technical education more practical, and to have a closer bearing on the duties likely to be performed by the young men and women who pass through these classes. * * * The attempt to grade classes has been done with the object of providing three sets of pupils passing from the elementary and other schools. There is, first of all, the set of pupils leaving school at 13 or 14 years of age who have completely finished their day-school career, and who, whatever education they receive after that, are bound, in the circumstances of their working life, to take it in evening classes. There is the second set who leave the secondary school at the age of 16, spending a longer period of their school life in day schools, and are able to take advantage of technical classes later on with an entirely different equipment. They are, indeed, on a

^a See in this connection, Report of the Commissioner, 1904, Vol. I, Chap. XIII; 1908, Vol. I, Chap. VI, pp. 213-214.

different plane from those attending the evening classes on continuation work. Then, last of all, we have to provide for a third category, namely, those who are going to pass through a university course, and are able to devote time to day work up to the ages of 19 or 20.

With respect to technical classes, Mr. Runciman, after noting the distinction between urban and rural conditions, continues:

In the urban areas not only have we provided for men, but we have specialized classes for women, and I hope that in the next two or three years it will become apparent that the classes for women are well worthy of the attention of working women in the great towns of the south of England as well as in the north of England. In agriculture we have not been able to make great progress, but there is one remarkable fact which is worth mentioning, namely, that garden classes in elementary schools have been enormously on the increase, and I believe that during the last few years we have trebled the number of these classes which are now carried on in these schools. There has been considerable development—and I can assure the committee that there will be more in future—in technical classes which can be attended by those who intend to enter on an agricultural career—young farmers and young laborers who at the present time have to spend long and laborious days in the fields or farm houses, but who are prepared to devote one or two evenings a week to the specialized training which can be provided in our technical classes. The cumulative effect of all this technical training on the young men and women of our country must show itself sooner or later.

Certainly we are touching the problem of the unemployable, if only to a small extent, yet with increasing vigor every year. The great employers have been giving considerable help in many parts of the country to those who organize the technical schools. Messenger boys, for instance, are induced more and more to take advantage of the classes in the evening. Some great employers, like the general post-office, not only give direct inducement to their messenger boys, but put a certain amount of pressure on them to take advantage of our classes, and many employers all over the country have made it a condition of service in their works or their great business establishments that the boys should attend a certain number of classes every week, and apprentices in works have also been able to take advantage of the facilities offered to them. Many employers, especially in the north of England, are allowing their young workmen time off during working hours so that they can attend these day classes conducted in the great technical institutions of our great towns. The inspectors of the board are not only taking a keen interest in the curriculum, but they are also acting as missionaries in what is one of the most useful forms of educational work initiated during the last few years.^a

The most serious criticism of the course pursued by the Government in the endeavor to extend the provision for secondary education relates to the division of pupils on social lines. As expressed by a member of the House—

There is one lamentable consequence of this parallel ladder—the elementary ladder side by side with the secondary ladder. The secondary ladder standing side by side tends to generate class distinction between elementary education and secondary education. The old Scottish practice, whereby the laird's son and the farmer's son, and even the laborer's son, learned their lessons in the same

^a Cited from *School Government Chronicle*, Vol. LXXXII, No. 2006 (July 24, 1909), p. 77.

class room, is on the way to get out of sight when elementary and secondary education are, so to speak, in water-tight compartments.

The member quoted with approval a criticism of the same tenor from the *Journal of Education* to the effect that this sort of distinction—

undoubtedly stamps secondary education as the privilege of those classes of the community which are rich enough to forego the use of the public elementary schools.

The success of the Government's efforts for stimulating and regulating secondary education is indicated by the number of schools which come into relations with the board, this being a voluntary action on their part. (See Table 7.)

The secondary schools referred to are not free schools, but they are made accessible to poor children of unusual ability by the scholarship system. One condition of the government grant to a secondary school is that 25 per cent of the places shall be open to nonpaying pupils. In 1907 no less than 27,000 working-class children took advantage of the privilege then offered. That number went up to 33,000 in the next year, and this year the number is very nearly 42,000. Every one of those children obtains a secondary education free of cost to himself. Mr. Runciman observes that—

the provision of secondary school places has to some extent placed a burden on secondary schools in the country. Accordingly the proportion of only 25 per cent will not be the measure of the proportion of free-place children in these schools after three or four years have passed away. But we have made up for the heavy expenditure by giving very much larger grants than we have ever before offered.

DISCUSSIONS OF CURRICULA.

The conditions that have made it necessary to increase and equalize the provision for secondary education in England have also created a demand for readjustments of curricula and programmes. The municipal secondary schools and the provincial universities that have been created during the last twenty years have been amply equipped as regards both men and implements for instruction in science; hence the meagerness of such provision in other parts of the country has been the more apparent. It is the province of the board of education to survey the whole domain with the view not only of equalizing opportunities, but also with a view of formulating well-balanced courses of instruction. The current activities of the board in the latter respect are illustrated by the regulations for secondary schools, and by several publications treating of specific branches of study. Among the latter is a report on science teaching in public schools embodying the results of an inquiry conducted by the association of public-school science masters, acting in consultation with the director of special inquiries and reports, for the board of education.

Of 71 schools to which the inquiry was addressed, 46 responded, including the oldest and most famous secondary schools of England. Several of these institutions, namely, Charterhouse, Cheltenham, Clifton, and Rugby accompany their replies by a history of the development of their science departments. In this respect these institutions are typical, and although, as the editor of the report observes, "the mere historical statement conveys very little idea of the conditions under which much of the earlier teaching was conducted," it does serve to emphasize the remarkable progress that has been made in the conception and method of scientific instruction.

The influences mentioned in the report as having "revolutionized the science teaching" in the class of schools considered are the ever-increasing importance attached to science subjects in examinations conducted by the universities; the influence of two "reformers," Profs. H. E. Armstrong and L. C. Miall, the first in the realms of physics and chemistry, the second in that of biology; and the inclusion of science on terms more favorable than previously in the examinations necessary for admission to the army.

The report gives full summaries of the replies to the "questionnaire," which called for particulars as to the organization and equipment of the school, the subjects covered by the science side, the full programme, expenses, etc. Particular value attaches to an appendix comprising six different schedules of science work, covering the courses in physics and chemistry followed in five schools from which complete returns were received, and two courses in biological subjects.

Among other recent publications of the government board, pertaining to secondary education, is a circular on the pronunciation of Latin, embodying the recommendations of the Classical Association supported by the philological societies of Oxford and Cambridge, the head masters' conference, and associations of masters and assistant masters of secondary schools. These recommendations are directed to a reform of the varied practices of the schools in respect to the pronunciation of Latin, by the uniform adoption of what was presumably the Roman method.

The board of education has also issued a memorandum dealing with the teaching of modern languages in state-aided schools which, among other considerations, urges the importance of the German language. The subject was brought to the attention of the board by the Modern Language Association, the commercial education committee of the London Chamber of Commerce, and other representative bodies.

In this connection it may be noted that a joint committee representing the Classical Association, the Modern Language Association, the English Association, the Incorporated Association of Head Masters, the Association of Head Mistresses, the Incorporated Associa-

tion of Assistant Masters, and the Incorporated Association of Assistant Mistresses was formed during the year, with a view to drawing up and submitting to the associations concerned a scheme for a simplified and consistent grammatical terminology, tending in the direction of uniformity in all the languages taught in schools.

The current interest in the general question of studies, their sequence and conduct, has been intensified by discussions of the report of a committee appointed by the British Association for the Advancement of Science to consider and advise as to the curricula of secondary schools. The report of the committee was submitted at the annual meeting of the association held in Dublin September, 1908.

The tendency of government regulations is to promote uniformity in curriculum and methods, a result at variance with the freedom and spontaneity that have long characterized the secondary schools of England. It is admitted, however, even by the strongest advocates of classical training, that the courses of instruction and the methods of the "public schools," i. e., endowed secondary schools, ought to be brought into closer relation with "contemporary life and thought." The aroused interest of leading school men, the critical scrutiny of government measures and the vigorous discussion of the entire subject of secondary curricula and methods now going on in England are among the most important outcomes of the enlarged functions of the board of education.

EXPENDITURE FOR PUBLIC ELEMENTARY SCHOOLS.

The expenditure for public elementary schools is met from parliamentary grants and rates (local property taxes) to which, in the case of nonprovided schools, are added private bequests, subscriptions, etc. The total current expenditure for elementary education for 1906-7, the last year for which the item was reported, was £21,162,353 (\$102,809,035). Of this amount, as shown in Table 9, the grants supplied 53.7 per cent; rates, 44.8 per cent; leaving a small balance to be supplied from other local sources.

In addition to the current expenditure there are capital expenditures to be met, principally the repayment of loans effected for the purchase of school sites and the cost of buildings. For the year referred to these capital expenditures amounted to about £3,500,000 (\$17,500,000). As this is an expense to be met entirely from the rates, it increases materially the proportion of the annual amount spent for elementary education which falls upon the local authorities.

The ever-increasing burden upon the rates for the service of education excites complaint even from the rich boroughs. The expansions of the system already referred to have added to the burden, and the

cry is general that since the Government sets the pace, it should bear the larger share of the increased cost.

It is pointed out, also, that on account of the mode of distributing the grants, having no regard either to the amounts raised locally or to differences in the assessable value of land, glaring inequalities and anomalies are fostered. The chairman of the Liverpool education committee, in a recent discussion of this subject, said:

The system does not differentiate between high and low rated communities, places where the cost of building and maintenance is high and not helped. Comparative efficiency, as evidenced by increased cost per child of teaching and maintenance, is disregarded, with the result that a ratepayer who provides the best may receive less and have to pay more in rates than another who provides the worst.

The average cost of education per scholar in Liverpool is £4 13s. 1d., in Manchester £4 13s. 10d., in Sheffield £3 15s. 6d., in Bradford £5 10s. 2d., and in Whitehaven it is £2 4s. The rate is 15½d. in the pound in Birkenhead, 17½d. in Leeds, 16½d. in Liverpool, 15½d. in Manchester, 6d. in Southport, 7½d. in Whitehaven. Each place received practically the same grant per scholar.^a

The report of the departmental committee on education rates notes in particular the great variations in expenditure in the different areas. Their investigation showed that—

the highest expenditure per child in average attendance in 1904-5, according to the figures received, was 134s. at Hornsey, and the lowest about 40s., in Whitehaven, a difference of over £4 14s. per child. While the expenditure in towns such as Preston, St. Helens, and Warrington ranges from 47s. 10d. to 53s. 8d. per child, the expenditure in some other industrial areas of about equal population is from half as much again to nearly double that in the towns named.

In the conference above referred to, Lord Stanley, of Alderley, after a detailed analysis of the situation, urged the appointment of a commission "to inquire into the incidence of the cost of education, local and imperial, for the whole United Kingdom." He said:

It is certainly essential that throughout the United Kingdom a very large share of the cost should be borne locally. We desire public local management; and a centralized bureaucratic system of education would be most mischievous and hostile to progress.

We must call everywhere for local contributions bearing a definite relation to state aid, and that local contribution must be associated with local public representation and management. It is, however, imperative that any new demands on local authorities put forward by the board of education should be accompanied by a corresponding parliamentary grant equal to one-half of the additional cost. Thus such new demands as medical inspection, feeding of children, maintenance of industrial schools, should not be valid unless accompanied by a grant of half the cost. This would make the board of education more chary of making new demands, regardless of the means of the local authority.

^a Report of North of England Education Conference, January 7-9, 1909. (School Government Chronicle, Vol. LXXXI, No. 1979 (Jan. 16, 1909), p. 60.)

STATISTICAL SUMMARIES.

TABLE 2.—*Schools and pupils under the board of education, England and Wales, 1906-7.*

Class of schools.	Schools.	Scholars.
Elementary education:		
Public elementary schools.....	20,513	5,968,120
Certified efficient schools.....	74	5,056
Special schools—		
For the mentally or physically defective.....	187	11,762
For the deaf.....	49	3,368
For the blind.....	38	1,592
For epileptics.....	4	192
Poor law schools.....	68	14,928
Higher education:		
Evening schools, etc., for further education.....	5,933	736,512
Higher elementary schools.....	61	13,682
Secondary schools.....	768	125,678
Teachers in training:		
Pupil-teacher classes and centers.....	828	33,497
Training colleges.....	74	9,147
Technical instruction:		
Technical institutions.....	33	2,747
Day technical classes.....	203	8,674
Schools of art.....	225	42,683
Art classes.....	44	2,650
Total.....	29,162	6,980,288

TABLE 3.—*Distribution of pupils under different types of local education authorities in England and Wales, for the year ending August 1, 1907.^a*

Class of schools.	Pupils in—		
	County areas.	County boroughs.	London.
Public elementary schools.....	3,453,808	1,778,920	733,255
Special schools:			
For the blind.....	187	1,624	435
For the deaf.....	1,250	2,089	821
For defectives.....	873	5,323	7,565
For epileptics.....	235	46	—
Evening schools, etc., for further education.....	315,522	245,508	175,482
Higher elementary schools.....	4,156	4,882	6,470
Secondary schools.....	55,445	50,756	19,477
Pupil-teacher classes and centers.....	15,569	13,578	2,792
Training colleges provided by local education authorities.....	110	470	730
Technical institutions.....	232	1,398	513
Day technical classes.....	1,312	3,915	2,566
Schools of art.....	16,787	21,668	4,228
Art classes.....	1,865	119	198

^a Analysis based upon tables in official report of the board of education, England and Wales. Statistics of public education, England and Wales, 1906-1908. Part I. Educational statistics. Analysis prepared for the National Educational Association. See Report of the Proceedings of the Annual Meeting, February, 1909.

TABLE 4.—*Number of teachers in England and Wales, 1906-7.*

Class of teachers.	Men.	Women.	Total.
Certificated:			
Trained.....	21,079	25,221	46,300
Untrained.....	9,136	31,624	40,760
Uncertificated.....	4,751	35,881	40,632
Others.....	6,339	42,930	49,269
Total.....	41,305	135,656	176,961

TABLE 5.—*Number, and salary status of teachers, by classes, in England.*

Class of teachers.	Men.				Women.			
	Number of teachers.	Salaries.			Number of teachers.	Salaries.		
		Maximum over—	Minimum under—	Average. ^a		Maximum over—	Minimum under—	Average. ^a
Head teachers, higher elementary schools.	23	£500	£200	£324	12	£300	£250	£267
Heads (certificated) in ordinary elementary schools.	12,359	400	60	168	16,456	300	50	116
Assistants in higher elementary schools.	139	400	100	160	125	200	75	125
Assistants (certificated) in ordinary elementary schools.	15,440	250	40	119	39,269	160	40	86
Heads (uncertificated) in ordinary elementary schools.	18	120	70	82	319	100	50	65
Assistants (uncertificated) in ordinary elementary schools.	4,023	250	40	67	31,508	140	40	54

^a Averages computed for National Education Association.^b The present exchange value of the £ is \$4.866.TABLE 6.—*Training colleges for teachers, England and Wales, 1906-7.*

Controlling authority.	Colleges.	Students.
Local education authorities.	6	^a 1,050
Universities.	88	1,410
University colleges.	88	813
Denominational:		
Church of England—		
Men.	12	1,240
Women.	21	2,366
Wesleyan—		
Men.	1	132
Women.	1	131
Roman Catholic—		
Men.	1	105
Women.	6	522
Undenominational:		
Men.	2	209
Women.	8	1,043
Total.	74	9,021

^a Only 164 of these in residence.^b Day students only.TABLE 7.—*Secondary schools in England and Wales recognized by the board of education for the years specified.*

	1904-5.	1905-6.	1906-7.
Number of schools.	575	689	768
Number of pupils:			
Boys.	61,179	65,994	69,109
Girls.	33,519	49,694	56,569
Total.	94,698	115,688	125,678

TABLE 8.—*Current expenditure for elementary education in England and Wales.*

Purposes.	ENGLAND.				
	1905-6.		1906-7.		Increase or decrease.
	Expenditure.	Equivalent in United States currency.	Expenditure.	Equivalent in United States currency.	
Ordinary public elementary schools	£15,295,976	\$74,430,219	£15,976,740	\$77,742,817	+\$3,312,598
Higher elementary schools.....	62,805	305,609	73,059	355,505	+ 49,896
Industrial and special schools.....	398,541	1,939,301	417,812	2,033,073	+ 93,772
Administration, loan, charges, etc.	3,216,871	15,653,294	3,309,122	16,102,188	+ 448,894
Total.....	18,974,193	92,328,423	19,776,733	96,233,583	+ 3,905,160

Purposes.	WALES.				
	1905-6.		1906-7.		Increase or decrease.
	Expenditure.	Equivalent in United States currency.	Expenditure.	Equivalent in United States currency.	
Ordinary public elementary schools..	£1,043,447	\$5,077,413	£1,098,405	\$5,344,839	+\$267,426
Higher elementary schools.....	10,747	52,295	8,267	40,227	- 12,068
Industrial and special schools.....	13,780	67,063	14,372	69,934	+ 2,881
Administration, loan, charges, etc...	255,127	1,241,448	264,670	1,287,884	+ 46,436
Total.....	1,323,101	6,438,209	1,385,620	6,742,884	+ 304,675

TABLE 9.—*Total expenditure for elementary education, England and Wales, 1906-7, classified by contributing sources.*

Source.	Expenditure.	Per cent of total.
Parliamentary grants.....	£11,380,781	53.7
Rates.....	9,491,702	44.8
Fees.....	62,025	1.5
Other local sources.....	227,845	
Total.....	21,162,353	.....

RECENT INVESTIGATIONS.

REPORT OF THE INTERDEPARTMENTAL COMMITTEE ON PARTIAL EXEMPTION FROM SCHOOL ATTENDANCE.

The legal provision for partial exemption from school attendance is peculiar to the British systems of elementary education, but the circumstances that have brought it about and its operations relate to the subject of the larger problem of child labor, which engages attention in all civilized countries; hence the methods and results of this inquiry of the committee above named have a universal interest.

The thoroughness with which the investigation was carried out is indicated by the following statement of the committee:

In the course of our inquiry we have held 16 meetings, at which we have examined 52 witnesses, including representatives of chambers of commerce and agriculture, of associations of employers and of trade unions, officials of the home office, of the board of education, and of local education authorities, members of the consultative committee of the board of education, certifying factory surgeons, school-teachers, farmers, and private persons whose opinions seemed to us likely to be of value.

Our thanks are due to local education authorities for the readiness with which they responded to our requests for returns in regard to various points upon which, in the course of our inquiry, we felt ourselves in need of more definite information than we possessed.

The committee on wage-earning children furnished us not only with the names of several useful witnesses, but with memoranda containing much valuable information prepared by teachers and others who had given their special attention to the question of partial exemption.

By the courtesy of mill owners, members of the committee were enabled to view several cotton, worsted, and silk mills, to see the children actually at work, and to discuss the question of half-time employment on the spot with employers, mill managers, and overlookers.

As to the present extent of partial exemption the committee reports that the system—

chiefly prevails in Lancashire, where it is largely availed of for employment in the cotton mills; in Yorkshire, where worsted spinning and weaving are the staple industry, and in a few counties for agricultural purposes. It is not by any means the case that in all the areas where partial-exemption regulations exist the population care to avail themselves of them.

We have obtained as accurate figures as possible from the various authorities as to the number of partial-exemption scholars. From the returns so compiled it appears that the average number of partial-exemption scholars during the year 1906-7 was 47,360, of whom 34,306 were employed in factories. Of those employed in factories, 20,302 are found in Lancashire, where it may be assumed that the great majority are employed in cotton mills; 10,517 are found in Yorkshire, where it may be assumed that they are mostly engaged in some branch of the worsted manufacture. The number of children obtaining partial exemption for the purpose of employment in agriculture was 3,800. There remained 9,254 children employed in other occupations. The great majority of the boys in this class were employed as errand boys by tradesmen of all descriptions, and of the girls, as domestic helps, principally in their own homes. The rest of the occupations were of a most miscellaneous character. For example, we find a few children employed as donkey boys, carters' boys, milk boys, golf caddies, and hawkers; others were engaged in dairy work, dressmaking, tailoring, rag sorting, hurdle making, and sea fishing.

It is to be further remarked that our statistics show that where half time is not already the custom of the district for textile or agricultural purposes, it is utilized very little for any subordinate industry or for domestic purposes. Thus there are many of the chief towns of England which have made no half-time by-laws at all; e. g., London, Birmingham, Plymouth, Newcastle, Lincoln, and York. There are also many towns where half-time regulations have been made,

but where, because children are not required in the principal industries, it is not the custom for them to leave school, and they are therefore not employed in other industries. Examples of this are to be found in Bristol, Manchester, West Hartlepool, Bournemouth, Norwich, Portsmouth, Hanley, and Wolverhampton. Where, on the other hand, half timers are employed in the staple industries of the town we find also a large number of partial-exemption scholars engaged in all kinds of miscellaneous occupations. For instance, in Bradford there were 326 half timers other than those in textile employment in 1906-7, while in Leeds, with nearly twice the child population of Bradford, but where there is no textile half time, there were only 13 nontextile half timers. In Lancashire it may be interesting to compare Oldham, with 215 nontextile half timers, and Warrington, where the employers agreed eight or nine years ago to employ no factory half-time labor and where, consequently, there is not a single partial-exemption scholar, though the by-law for partial exemption still remains in force. The problem, therefore, with which we have to deal may be said to be confined to certain parts of the textile industries, localized chiefly in Yorkshire, Lancashire, and Cheshire, and to certain counties where at present there are partial-exemption provisions in force for agricultural purposes. (Cited from School Government Chronicle, No. 2008, Vol. LXXXII, August 7, 1909.)

Having dealt in detail with existing laws regulating exemption from school attendance, and the extent to which partial exemption prevails, the committee consider the objections to the system. They state—

that the opinion of the teachers in the schools is practically unanimous in desiring the cessation of the system of partial exemption in all its forms. The objections taken in the evidence given before us are that the time, attention, and interest of the children who go as half timers are divided between the mill and the school, and as a consequence they are unable to continue to pay proper attention to their school work. Their progress is retarded, if not absolutely brought to a standstill. The children come to school tired and sleepy. The organization of any school in which there are half timers suffers considerably. Arrangements have to be made for teaching in the same class children who attend the whole week and children who are only attending half. The full-time child frequently may receive two hours' instruction in a given subject, while the half timer can only attend one hour's teaching per week in the same subject. The result is obviously detrimental to the half-time child, who loses a large part of his education. If the half timers are a small minority of the class, they tend to be neglected and left behind the others. If, on the other hand, they are numerous, the teacher has necessarily to give them special attention while they are in the school. The consequence is that the full timers suffer in their turn, for the whole class tends to have its pace reduced to the pace of the slower children. * * *

In this connection it should be noticed that the actual number of hours during which the half timer is employed during the day in the mill and school together are greatly more than the school hours of the full-time scholar. During the week, when the child attends the mill in the morning, it spends thirty hours in the factory and twelve and a half in the school, and during the week when it attends the school in the morning, it spends twenty-five and a half hours in the factory and fifteen in the school. On an average, therefore, of a fortnight's work, the half-time child has been engaged at work and school

together for half as much again in actual hours as the full-time scholar. And when the child goes to the mill in the morning it has by the time it begins to attend school in the afternoon already worked for as long in the mill as the total school hours of a full-time child. It is not surprising that the teachers find that the faculties of the half-time children often require rest rather than exercise in the afternoon school. The educational loss of the half timer may be gauged by the small extent to which he takes advantage of opportunities for further education which offer themselves to children leaving public elementary schools. Throughout Yorkshire and Lancashire there now exists many secondary schools with a large number of free places which can be obtained by public elementary school scholars with the necessary equipment, and in most of the large towns there are now systems of graded continuation schools, open for small fees to the working-class population. But secondary education is practically closed to the half timer.

The injurious effects of the half-time system on the moral character and the health of the children are forcibly presented, and the report then proceeds to deal with the argument for the system on the ground of necessity. The cases of many industrial towns, notably Huddersfield and Glasgow, where the half-time system has been discontinued, lead the committee to conclude that—

the main obstacle, however, to the disappearance of half time is the custom of the textile districts. The children themselves like going to the mills. At first, at any rate, they enjoy the sense of becoming grown up and independent, and of having money to spend. We were not surprised to hear of a case where out of 300 children questioned only 7 replied that they would have preferred not to have gone to the mill. The regrets come later, when the young person of 18 or 20 begins to miss the schooling that might have led to a better position in life and better wages in the long run.

The committee declares, also—

that though there are cases where the half-time wage may save a family from serious distress or application for poor relief, such cases are not very numerous, and are certainly not the main reason for the continuance of half time. The wages earned by the half timers are never very considerable; in many cases in the cotton trade no payment is made for some weeks, and in some cases months.

The outcome of the investigation so far as regards the work of the committee is embodied in the following recommendations:

(1) That all partial exemption be abolished from a date not earlier than January 1, 1911.

(2) That at the same time total exemption under the age of 13 be abolished.

(3) That the attendance certificate for total exemption be abolished.

(4) That total exemption at the age of 13 be granted only for the purposes of beneficial or necessary employment.

(5) That the ordinary condition for total exemption be due attendance at a continuation class, but

(6) That, subject to the approval of the board of education, an authority may adopt as an alternative condition the passing of a standard not lower than Standard VI.

REPORT OF THE CONSULTATIVE COMMITTEE ON ATTENDANCE, COMPULSORY
OR OTHERWISE, AT CONTINUATION SCHOOLS.

The report of the consultative committee on attendance at continuation schools covers, in part, the same ground as the previous inquiry, and affords striking confirmation of its disclosures and conclusions.

The committee ascertained that about three-fifths of the population of England and Wales live in areas where no child under 14 years of age is wholly released from school attendance before he or she has reached the seventh standard. They estimate that out of 211,000 children between the ages of 12 and 14 who have left the day school, there are 171,000 children not attending any school; out of 2,022,000 children between the ages of 14 and 17 there are 1,750,000 who are not under any form of instruction.

The decay of the old system of apprenticeship and the increasing influence of scientific knowledge upon trade conditions require more knowledge for success, yet the committee find that the conditions for obtaining this knowledge are harder. "At best," they say, "a boy obtains by practical experience a certain skill in one branch of trade. At worst he is set to purely mechanical work, for which little or no skill or thought is required, and under the monotony of which his faculties, moral no less than mental, often fail to develop." Under present conditions the years between 13 and 17 are years of waste.

In this connection the committee say:

Education as a sheath, protecting boys and girls during adolescence against tendencies to injurious forms of employment, is much needed in this country. The point of danger, which used to occur in childhood, has now been largely transferred to adolescence. There is peril at the close of the day school course, and peril again at the age of 17 or 18, when the passage should be made to adult skilled employment. The first danger can only be met by the prolongation of educational care throughout adolescence. The second danger can only be met by the provision of technical classes in which younger work people of both sexes may acquire, during the years of adolescent employment, the skill needed to qualify them for well-paid adult occupation.

Among the practical conclusions embodied in the recommendations of the committee having special reference to the conditions above referred to, the following are particularly suggestive:

The education given in the day school should be improved by reducing the size of classes, by increasing the proportion of qualified teachers, and by introducing more manual work (including domestic subjects in the case of girls), and by improving the regularity of attendance; further, the day school period should at once be extended both in town and country by the abolition (except, as stated below, in individual cases) of any form of whole-time or half-time exemption from school attendance under the age of 13. After a short interval all exemptions from day school attendance should be forbidden, except as stated below, to children under 14 years of age. * * *

In rural districts the local education authority should have the option of allowing girls whose assistance is required at home for part of the day to

attend the day school half time from 13 to 15 instead of whole time up to 14, but only for the sake of home duties and not for wage-earning work, and only where properly organized instruction can be given to such girls. * * *

Exemption from full-time attendance at the day school in the case of boys and girls under 16 years of age should only be allowed when the parents or guardians can show that the children in question are to be suitably employed, and while they continue to be so employed. It might be necessary to arrange special classes for the pupils thus retained at school or recalled after an interval of outside employment. * * *

It will be very desirable to interest the day-school teacher in the work of the continuation school, and it will often be necessary to employ them in giving instruction there. It will also be advantageous to provide that head teachers in the day schools shall be able to take part in the direction of the continuation school or group of continuation schools to which their pupils go. Care must be taken, however, to prevent overstrain in the case of teachers who teach both in day and evening schools.

Local education authorities should establish classes in which persons who are already teachers should be trained in the more specialized parts of the work of the continuation school and in which experts in such subjects may be trained in the art of teaching.

In order to promote voluntary attendance upon continuation schools the committee recommend—

effective encouragement from employers of labor, systematic visitation of the parents of children who are about to leave the day school, the personal influence of the day-school teacher, propaganda among work people, close cooperation on the part of the local education authority with the managers of boys' and girls' clubs and other voluntary agencies, the better adjustment of the courses of instruction to the needs of local industries, and the provision of systematic classes in history, literature, and economics for adult students,

and the payment of grants to children as an encouragement to them to attend.

It is further recommended that—

it should be the statutory duty of the local education authority of each county and county borough to make suitable provision of continuation classes for the further education of young persons resident in their district from the time they leave the day school up to their seventeenth birthday, and to keep a register of all such young persons, with a record of their occupations.

It should be lawful for the education authority of any county or county borough to make by-laws (subject to confirmation by the board of education) requiring the attendance at continuation classes to an age to be fixed by the by-laws, but not exceeding 17 years, of any young persons resident or working in their district who are not otherwise receiving a suitable education.

As a means of giving effect to the last recommendation, it should be—

the statutory duty of every employer of any young person under 17 years of age (a) to enable him or her to attend continuation classes for such period of time and at such hours as may be required by the by-laws of the local education authority of the district in which such young person either works or resides, and (b) to supply the names of all such young persons to the local authority on demand. * * *

As regards curriculum, the continuation schools should give effective training for the duties of citizenship and should have reference to the crafts and industries practiced in the district, including agriculture, when practiced, and the domestic arts. Prominence should be given to practical and manual instruction in the courses, but the claims of general education should not be disregarded. On every ground the course of instruction should also include systematic physical training.

For the planning of courses of instruction, and for their periodical adjustment to the needs of the district, local education authorities should establish advisory committees, including representatives of the employees and work people in each calling and of persons experienced in teaching.

It deserves consideration whether, in view of the cost of a fully organized system of continuation classes, and of the national character of the work, government grants for continuation schools might not be paid on a higher scale to those local education authorities which adopted by-laws prescribing compulsory attendance.

REPORTS OF THE POOR-LAW COMMISSION AND THE ROYAL COMMISSION ON THE FEEBLE-MINDED.

The purpose of the Government to bring the entire child population under proper supervision and care is indicated by the work of the recently appointed poor-law commission, the results of which are set forth in the voluminous report published during the year. The great problem before the commission was that of a reform in the local administration of the system. But this involves immediately the method of dealing with the children who come under the guardians of the poor and, incidentally, consideration of the means of preventing the increase of the pauper classes.

The commission condemns absolutely the maintenance of pauper children in the workhouse and advises that the system of boarding out be extended as far as possible, with a wise supervision of such children by local women officers under the charge of the local government boards, up to the age of 21. Where this course is practicable, the children would be sent to the ordinary elementary school, and thus the stigma of pauperism would be obliterated. Where, for any reason, this action can not be taken, the commission advises that the children be placed in a boarding institution under public supervision.

It is worthy of note that this commission agrees with the inter-departmental committee and the consultative committee in recommending, as one means of reducing pauperism, the extension of the obligatory school period to fifteen years and improved facilities for preparing the young for permanent occupations.

The Report of the Royal Commission on the Care and Control of the Feeble-Minded is of interest in this relation chiefly for the evidence it affords that the uniform organization of the country for the purposes of the education acts has become the means of practical progress in respect to all matters affecting the welfare of children.

The commission recommends new provision for the care of the permanently feeble-minded and the removal of such from the charge of the education authorities. The report discusses the social dangers attending the adult life of such children with a comprehensiveness that was impossible until the passage of the law of 1889, empowering local education authorities to establish special schools for the physically and mentally deficient.

Out of the overwhelming mass of information contained in the reports of the two commissions specified, having reference to children who are a charge upon the State, one conclusion stands out with marked distinction; namely, the importance of such adjustments of the public provision for education as shall meet the capacities and conditions of defective children without detriment to the great mass of children who are of normal health and capacity.

RECENT PUBLICATIONS OF SPECIAL INTEREST BY THE BOARD OF EDUCATION (ENGLAND).

PUBLICATIONS RELATING TO ELEMENTARY SCHOOLS.

- Code of regulations for public elementary schools in England (excluding Wales and Monmouthshire), with schedules. London, Eyre & Spottiswoode, Ltd., 1909. 52 p. 8°. [Gt. Brit. Parliament. Papers by command, Cd. 4735.]
- Code of regulations for public elementary schools in Wales (including Monmouthshire), with schedules. London, Eyre & Spottiswoode, Ltd., 1908. 58 p. 8°. [Gt. Brit. Parliament. Papers by command, Cd. 4170.]
- Regulations for the preliminary education of elementary school-teachers. (In force from August 1, 1909, in England, excluding Wales and Monmouthshire.) London, Eyre & Spottiswoode, Ltd., 1909. 44 p. 8°. [Gt. Brit. Parliament. Papers by command, Cd. 4628.]
- Regulations for the preliminary education of elementary school-teachers. (In force from August 1, 1908, in Wales and Monmouthshire.) London, Wyman & Sons, Ltd., 1908. 44 p. 8°. [Gt. Brit. Parliament. Papers by command, Cd. 4066.]
- Regulations for the training of teachers for elementary schools. (In force from August 1, 1909.) London, Eyre & Spottiswoode, Ltd., 1909. 44 p. 8°. [Gt. Brit. Parliament. Papers by command, Cd. 4737.]
- Report of the consultative committee on attendance, compulsory or otherwise, at continuation schools. VI.—Report and appendices. (Adopted by the committee, May 7, 1909.) VII.—Summaries of evidence. London, Eyre & Spottiswoode, Ltd., 1909. [Gt. Brit. Parliament. Papers by command, Cd. 4757; Cd. 4758.]
- How to become a teacher in a public elementary school. London, Eyre & Spottiswoode, Ltd., 1908. 45 p. 8°.
- Memoranda relating to the medical inspection of school children in England. Circulars 576, 582, 592. [Issued in 1907, 1908.]

PUBLICATIONS RELATING TO RURAL SCHOOLS.

- Educational pamphlets. No. 13. The problem of rural schools and teachers in North America. London, Wyman & Sons, Ltd., 1908. 70 p. 8°.

Dymond, T. S. Suggestions on rural education, together with some specimen courses of nature study, gardening, and rural economy, for schools and classes of various grades and types. London, Eyre & Spottiswoode, Ltd., 1908. 54 p. 8°.

Memorandum giving an outline of the successive legislative and administrative conditions affecting the relation of the board of education to agricultural education in England and Wales, with appendices giving information as to the parliamentary grants available in respect of agricultural education. London, Eyre & Spottiswoode, Ltd., 1908. 21 p. 8°. [Gt. Brit. Parliament. Papers by command, Cd. 4271.]

PUBLICATIONS RELATING TO SECONDARY SCHOOLS.

Regulations for secondary schools. (In force from August 1, 1909, in England, excluding Wales and Monmouthshire.) London, Eyre & Spottiswoode, Ltd., 1909. 15 p. 8°. [Gt. Brit. Parliament. Papers by command, Cd. 4691.]

Regulations for secondary schools. (In force from August 1, 1908, in Wales and Monmouthshire.) London, Wyman & Sons, Ltd., 1908. 18 p. 8°. [Gt. Brit. Parliament. Papers by command, Cd. 4144.]

Regulations for the training of teachers for secondary schools. (In force from August 1, 1909.) London, Eyre & Spottiswoode, Ltd., 1909. 6 p. 8°. [Gt. Brit. Parliament. Papers by command, Cd. 4753.]

Educational pamphlets, No. 17. Report on science teaching in public schools represented on the association of public school science masters. London, Eyre & Spottiswoode, Ltd., 1909. 39 p. 8°.

Circular 711. Teaching of geometry and graphic algebra in secondary schools. 1909.

Circular 707 (formerly issued as Circular 555, in February, 1907.) Regulations for secondary schools. Pronunciation of Latin.

Circular 705. Memorandum on language teaching in state-aided secondary schools in England. April, 1909. London, Eyre & Spottiswoode, Ltd., 1909. 8 p. 8°.

EDUCATION IN SCOTLAND.

THE ACT OF 1908.

The system of public education in Scotland has entered upon an era of expansion through the passage of the "education (Scotland) act, 1908," which received royal assent December 21, 1908.

The act makes no change in the basis of the system; the parish, which may be likened to the district in New England, remains the local unit of administration, and the elected school boards retain their former powers with considerable extension as regards both elementary and secondary education. The additional powers are for the most part optional, and hence are likely to be exercised gradually, with little disturbance in the usual course of progress. The larger boards are already taking steps to meet the new obligations, and there is promise of the same order of constructive work which has charac-

terized the past history of the system of public education in the principal centers of Scotland.

The enlarged powers of school boards relate to the general well-being of children, to the prolongation of the school life of the young, and to the increase of the facilities for secondary education.

The scope of the authority conferred upon the board under the first head is indicated by the following official statement:

The new act gives school boards considerably enlarged powers for dealing with parents who may prove to be neglectful, and insures, as far as legislation can, that the sufficient feeding and clothing of the child while at school, as well as its physical condition generally, shall receive proper attention, where possible, at the hands of its natural guardians, but failing this through other agency. At the same time the way is opened for boards to exercise a useful influence in guiding and advising as to their future careers in life those young people who without this guidance might be content to yield to the easy temptation of casual labor. They will also be expected to cooperate with employers in endeavoring to secure that the workers of the future shall receive the best industrial training it is possible to give in the particular circumstances of each case.^a

In the interests of children in outlying districts, school boards are authorized "to grant exemption from the obligation to attend school to individual children over 12 years of age for such time and upon such conditions as to the amount and manner of further attendance at school until the age of 14 as the board" may deem fit.

In respect to the service of medical inspection of pupils the law is, in a sense, mandatory, since it not only authorizes school boards to maintain such service, but empowers the education department to require it.

The provisions of the law in regard to this service are as follows:

MEDICAL INSPECTION OF CHILDREN.

4. A school board may, and where required by the department shall, provide for the medical examination and supervision of the pupils attending schools within their district to such extent and subject to such requirements as may from time to time be prescribed by any code or minute of the department, and for the purposes of this section the school board may employ medical officers or nurses, or arrange with voluntary agencies for the supply of nurses, and provide appliances or other requisites. It shall be a condition of grant to the managers of any school within the district of the school board at which there is not provision to the satisfaction of the department for the medical examination and supervision of the pupils that such managers shall give admission and all necessary facilities for the discharge of his duties to any person so employed or supplied.

DEFECTIVE CHILDREN.

5. It shall be lawful for a school board which makes special provision for the education of physically or mentally defective children to require the parents of such children to provide efficient education for such children up to the age of 16 years.

^a Scotch Education Department, Circular 417, January 15, 1909.

NEGLECTED CHILDREN.

6. (1) When as the result of medical inspection or otherwise it is brought to the notice of a school board that a child attending a school within their district is in a filthy or verminous state, or is unable by reason of lack of food or of clothing to take full advantage of the education provided, it shall be the duty of the school board, after due warning, to summon either or both of the parents or the guardian of such child to appear before them to give an explanation of the child's condition; and if the school board shall find that such explanation is not forthcoming or is insufficient or unsatisfactory and that the condition of the child is due to neglect, they shall transmit a copy of such finding to the parent or parents or guardian of the child and to the procurator fiscal, and it shall be the duty of the procurator fiscal to institute a prosecution under the subsection immediately following.

(2) Without prejudice to the general operation of the prevention of cruelty to children act, 1904, or any act amending the same, neglect to exercise due care of a child as aforesaid shall be deemed willful neglect likely to cause the child unnecessary suffering within the meaning of such act, punishable summarily as an offense of cruelty in terms of such act, and subject to the provisions thereof as to the committal and custody of the child and otherwise:

Provided, That if it shall be shown to the satisfaction of the school board, or, in the event of a prosecution under such act, of the sheriff, that such parent or parents or guardian are unable by reason of poverty or ill health to supply sufficient and proper food or clothing for the child, or to give the child the necessary personal attention, the school board, if satisfied that the necessities of the case will not be provided for by voluntary agency, shall make such provision for the child out of the school fund as they deem necessary during such period while the child is under obligation to attend school as they may determine; but it is hereby provided that any aid given in terms of this section shall not deprive such parent or guardian of any franchise, right, or privilege, or subject him to any disability:

Provided, also. That the school board, where they deem it necessary owing to the condition of the child, shall have power to make temporary provision for the child out of the school fund pending the completion of the procedure hereby prescribed, and to recover the cost of such provision from such parent or guardian as an alimentary debt, unless it is shown to the satisfaction of the school board that such parent or guardian was unable by reason of poverty or ill health to supply sufficient and proper food or clothing for the child or to give the child the necessary personal attention.

PROVISION OF AND ATTENDANCE AT CONTINUATION CLASSES.

As a means of increasing the preparation of the young for the stress of industrial life school boards are authorized, at their discretion, to require the attendance of youths above 14 years of age (the upper limit of legal compulsion) up to the age of 17 years at continuation classes, and, moreover, the education department may oblige school boards to provide continuation classes. The scope of the continuation classes is outlined in the following clause of the law:

Without prejudice to any other power of a school board to provide instruction in continuation classes, it shall be the duty of a school board to make

suitable provision of continuation classes for the further instruction of young persons above the age of 14 years with reference to the crafts and industries practiced in the district (including agriculture, if so practiced, and the domestic arts), or to such other crafts and industries as the school board, with the consent of the department, may select, and also for their instruction in the English language and literature, and in Gaelic-speaking districts, if the school board so resolve, in the Gaelic language and literature. It shall also be their duty to make provision for their instruction in the laws of health and to afford opportunity for suitable physical training.—Sec. 10.—(1).

SUPERANNUATION SCHEME.

Definite provision is made for retiring allowances for teachers, to be provided by treasury grants supplemented by allowances from the school boards. Further than this, a national superannuation scheme is outlined in the act which places upon the education department the duty of formulating a definite plan for giving effect to the proposition advanced, which plan must, however, be submitted to Parliament for approval.

EDUCATION (SCOTLAND) FUND.

The financial clauses of the new act provide for the consolidation of several funds already available for education, but hitherto independently administered, amounting to about £500,000 (\$2,500,000) a year. The change in this respect marks the initial stage in the unification of what are at present separate parts of a national system of education.

As explained in the official circular above cited—

the new fund may be utilized to assist the universities, if they can make out a good cause for aid, while it will certainly be drawn upon to support the great central institutions—technical colleges, colleges of agriculture, schools of art, and the like—which have sprung or are springing up in response to modern requirements and the benefits of which are not limited to any single area, but extend over the country as a whole. Again, in the event of a national superannuation scheme for teachers being established, any annual sum that may be necessary to secure its financial equilibrium will likewise be regarded a first charge. [After these general charges are met, the remainder is to be broken up into district funds, to be distributed with due regard to] the relative cost of education and the relative wealth or poverty of the district to which the distribution is to be made, as well as of its population. * * *

[In the application of the district funds] all expenditure on the general education service of the district, such as is not properly referable to any one school board area, ranks as a first charge. * * *

Prominent among the first charges on a district fund is that under which schools boards, which have established an intermediate or secondary school, are to be recouped for such reasonable expenditure as they may have incurred in respect of pupils drawn from surrounding parishes. In so far as a school of this type is a central school, serving not merely the parish, but the district,

in so far will it receive financial assistance from the district fund. A similar provision applies to continuation classes of an advanced character, and also (under due safeguards) to endowed schools. * * *

Another first charge of real importance is the establishment of a well-articulated bursary scheme, which shall carry pupils not only to the central intermediate and secondary schools, but also to technical schools, schools of agriculture, etc., and even, if need be, to the universities. Yet another is the provision of special teachers whose services can be placed at the disposal of school boards for giving instruction in technical subjects, such as agriculture, horticulture, physical training, household management, and the like. In the case of small rural schools the existence of a staff of traveling teachers of this sort should make for both efficiency and economy. In the same connection it should be noted that grants may be made from the district fund in aid of capital expenditure of a special kind, incurred by any school board within the district on the provision of schools or class rooms for physically or mentally defective, blind, or deaf-mute children, or of school gardens, laboratories, workshops, or of such other equipment as may be required for the use of the traveling teachers referred to above, or of similarly qualified teachers appointed and paid by the school board itself. * * *

When the first charges on each district fund have been met the balance is to be distributed to the school boards and managers of state-aided schools within the district, as an addition to the fee grant, that is, in relief of their ordinary expenditure.

Heretofore the state-aided system of education has had chief regard to children under 14 years of age. As the circular cited sets forth—

this will be so no longer. In many respects the three or four years that immediately follow the period of compulsory attendance are the most critical in a pupil's life, and for the proper use of these a more clearly defined responsibility will henceforth rest upon school boards. In future the individual citizens who undertake this responsibility will find ampler scope for the exercise of their administrative talents. The development of secondary and technical education under a more elastic system than has up till now been possible, the more perfect organization of continuation classes, the selection of young people who deserve to be guided, and, where necessary, assisted by bursaries in their progress toward the universities or the central institutions for the teaching of science, of art, and of agriculture—these are some of the duties that will lie to the hands of school board members. Their successful discharge will call into play the highest qualities of skill and discretion, [and will bring school boards] into more direct and living contact with every element of importance in the educational fabric of the country.

PRESENT CONDITIONS.

The salient particulars in the system of education which have been strengthened and extended by the act above considered are set forth in Tables 10-14, appended. Attention is here called to two features of the system of special interest at the present time.

TRAINING OF TEACHERS.

The official report for 1908-9^a calls attention to the arrangements made by the regulations of 1873 for affording teachers in training the advantage of university study and instruction. In 1905 measures were adopted for giving the universities a larger share in the training of the future teachers of the country, and this relation has been further increased by later regulations. The official statistics show that the total number of men preparing for the service, i. e., 658, were attending training centers in the university towns, and 2,953 women in a total of 3,220.

CONTINUATION CLASSES.

With respect to continuation classes, the need of which is emphasized by the new law, the official report gives the following particulars:

Of the 341 separate bodies of managers responsible for continuation classes during the session 1908-9, 305 were school boards. The other local authorities recognized for educational purposes included four secondary education committees and two county councils. Generous support in aid of continuation classes is also given by various other municipalities.

The number of separate centers shows no sign of increasing. The continuation class system is now well established and prosperous in the larger towns, but in the country districts there is a regrettable instability, many classes springing up for one session only to cease the next. This is evidenced by the fact that of the 757 centers recognized during 1907-8, 137 centers, representing 61 separate managing authorities, have dropped out this session. As emphasizing further the frail existence of many classes, it is observed that at 43 centers where it was proposed to institute classes the proposals fell through, either before any actual meetings of these classes or after a trial of a few weeks. These results are due to varying circumstances, such as remoteness of district and the severities of the weather, but would appear to be in a large measure attributable to the lethargy shown by managers and pupils concerning education beyond the stage of the day school.

With a view to meeting the case of classes conducted under difficult conditions power has been taken in recent codes to grant a shortened session, instead of the normal term of twenty weeks, where good reason has been shown for such relaxation. The reduced course averages about fifteen weeks.

The report notices as matter of satisfaction the number of advanced classes for commercial and industrial training is increasing, particularly in urban districts.

^a Report of the Committee of Council on Education in Scotland, 1908-9.

TABLE 10.—*Comparative statistics of elementary and higher grade schools in Scotland.*

	1900.	1905.	1906.	1908.
Estimated population.....	4,324,944	4,672,145	4,723,539	4,828,028
Number of schools:				
Day schools.....	3,104	3,123	3,125	3,143
Higher grade schools.....	31	121	137	169
Accommodation:				
Day schools.....	893,842	963,151	978,109	999,482
Higher grade schools.....	9,292	28,267	31,742	36,143
Average number on the registers during year:				
Day schools.....	753,287	787,492	788,850	792,495
Higher grade schools.....	3,271	16,291	19,319	21,839
Average attendance:				
Day schools.....	626,089	681,873	688,912	692,144
Higher grade schools.....	2,949	14,508	17,150	19,932
Number of—				
Certificated teachers.....	10,845	13,604	14,186	16,019
Assistant teachers.....	2,418	2,718	2,794	2,129
Pupil teachers.....	3,926	4,191	4,323	1,896
Students in training colleges.....	1,250	1,395	1,534	.....
Students at other training centers.....	110	333	661	3,320

TABLE 11.—*Progress of higher grade schools since their establishment.*

Year.	Number of schools.	Accommodation.	Average number of scholars on registers.	Average attendance.			
				First year's course.	Second year's course.	Beyond second year.	Total.
1900.....	27	7,740	2,832	1,606	604	351	2,561
1901.....	34	9,721	3,518	1,712	1,053	505	3,270
1902.....	35	10,103	4,327	2,209	1,006	606	3,821
1903.....	36	10,299	5,157	2,663	1,223	662	4,548
1904.....	74	18,965	10,453	6,650	2,137	1,320	10,107
1905.....	121	28,267	16,291	7,937	4,340	2,231	14,508
1906.....	137	31,742	19,319	8,664	5,086	3,400	17,150
1907.....	147	34,242	20,872	8,734	5,719	4,014	18,467
1908.....	169	36,143	21,839	9,634	6,018	4,280	19,932

TABLE 12.—*Continuation classes under local authorities, Scotland, for the years specified.*

Year.	Separate centers.	Individual students.
1901-2.....	774	78,171
1906-7.....	772	100,586
1907-8.....	757	101,664

TABLE 13.—*Secondary schools in Scotland under government inspection, 1908.*

Schools.		Enrollment.	Income.
Class.	Number.		
Public.....	32	8,893	£151,510
Endowed.....	23	7,947	118,533
Private.....	53	1,370	.....
Total.....	a 108	18,210	.....

^a There were in addition 147 higher grade schools with 21,839 pupils, of whom a large proportion were taking secondary studies.

TABLE 14.—*Current expenditure for day schools, Scotland, 1908.*

Source.	Amount.	Equivalent in United States currency.	Per cent of total.
Parliamentary grants.....	£901,492	\$4,381,251	54.6
Rates..... ^a	a 748,132	3,635,922	45.4
Total.....	b 1,649,624	8,017,173	.....

^a In addition to this amount contributed for current expenditures, the repayment of loans for sites and buildings constitutes an annual charge on the rates. The total from this source for all purposes in 1907-8 was £1,351,845, which necessitated an average rate of 12.59 pence in the pound.

^b The cost of maintenance per pupil in average attendance was: In public schools, £3 11s. 1½d.; in voluntary schools, £2 15s. 1½d.

EDUCATION IN IRELAND.

The year has been marked in Ireland by measures for the organization of the two universities, to be situated, respectively, at Dublin and at Belfast, as provided for by the Irish universities act of 1908. These universities, it is believed, will exercise an important influence on the entire system of public education in Ireland and assist materially in bringing about the long-expected unification of its distinct divisions. At present the elementary or national schools are the charge of a body of national commissioners. The secondary or intermediate schools have been brought into relations with the intermediate board, which exercises large control over their work by a system of examinations for the pupils and of grants to the schools on the basis of the results. The two administrative bodies have no relation with each other and both operate independently of the universities. Even the training colleges for teachers have no relation with the higher institutions.

The department of agriculture and technical instruction, which is charged with the administration of the funds for promoting technical instruction in Ireland, has taken measures to coordinate its work with that of other educational authorities. The instruction fostered by the funds of the department is organized under the councils of county boroughs, urban districts, and counties, and thus local and central forces have all been combined in the furtherance of this important department of education in which Ireland has furnished suggestive lessons for all other countries.^a

The meeting of the British Association at Dublin, in September of last year, naturally was made the occasion for a survey of the educational conditions and prospects of the country, and this event, taken

^a For an account of the system of technical instruction in Ireland, see Report of the Commissioner of Education for 1907, Vol. I, chap. 3, pp. 116-121.

in connection with the activity in university circles, has greatly stimulated interest in the special problems of education pertaining to this division of the Kingdom.

The salient particulars in the current record of the elementary schools are presented in the following tables, to which is added a summary of the examinations conducted by the intermediate board:

TABLE 15.—*Summary of the enrollment and average attendance in the national elementary schools of Ireland for the years named.*

Year.	Number of schools in operation.	Average number of pupils on rolls.	Average daily attendance.	Percentage of average daily attendance to average number on rolls.
1900.....	8,648	770,622	478,224	62.0
1901.....	8,692	754,028	482,031	63.9
1902.....	8,712	747,864	487,098	65.1
1903.....	8,720	741,795	482,489	65.0
1906.....	8,607	739,009	493,558	66.8
1907.....	8,538	732,460	485,979	66.3

TABLE 16.—*Number and classification of teachers in the national elementary schools of Ireland for the years named.*

	1903.	1906.	1907.
Principals:			
Males.....	4,656	4,560	4,547
Females.....	3,599	3,592	3,554
Total.....	8,255	8,152	8,101
Assistants:			
Males.....	1,088	1,220	1,220
Females.....	2,699	3,226	3,384
Total.....	3,787	4,446	4,604
Total principals and assistants.....	12,042	12,598	12,705
Junior assistants.....	11	1,494	1,845
Manual instructresses.....	560		
Work mistresses and industrial teachers.....	502		
Temporary assistants.....	29	73	12
Gross total.....	13,144	14,412	14,834

TABLE 17.—*Expenditure for national schools of Ireland, 1907.*

Source.	Amount.	Equivalent in United States currency.
From state grant for primary education.....	£1,291,736	\$6,277,837
From local sources.....	118,714	574,950
Total from all sources.....	1,410,450	6,852,787

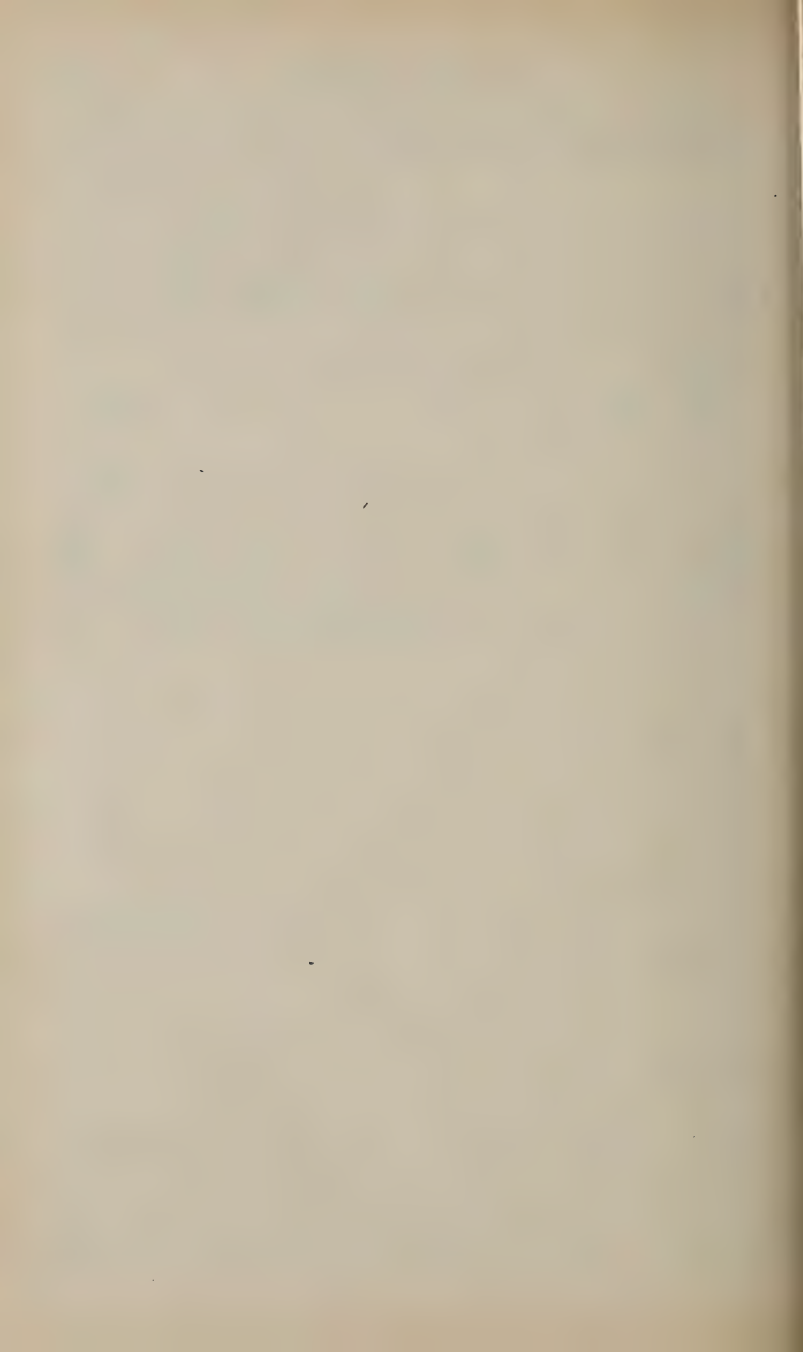
	£	s	d
Rate per pupil from state grants.....	2	13	9
Rate per pupil from local sources.....	4	11	
Rate per pupil from all sources.....	2	18	8

TABLE 18.—*Number of pupils from intermediate schools of Ireland examined by the government board, and the number who passed in the years specified.*

Year.	Pupils examined.			Pupils who passed.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
1900.....	5,611	1,977	7,608	3,799	1,515	5,314
1904.....	6,276	2,254	8,530	3,934	1,464	5,398
1908.....	7,736	3,647	11,383	4,640	2,332	6,972

TABLE 19.—*Schools in Ireland receiving grants on results of intermediate examinations, and amounts received.*

Province.	Schools.				Amount of grant received.	
	For boys.	For girls.	Mixed.	Total.	£	Equivalent in United States currency.
Leinster.....	67	48	5	120	19,826	\$96,354
Ulster.....	30	41	24	95	12,691	61,688
Munster.....	55	30	7	92	13,843	67,277
Connaught.....	13	5	4	22	3,561	17,306
Total.....	165	165	40	329	49,922	242,625



CHAPTER IX.

EDUCATION IN FRANCE.*

France, Republic: Area, 204,092 square miles; population, 39,252,267 (1906). Civil divisions having special functions in educational administration: Departments (90 in number, including 3 in Algiers), communes (cities or villages).

TOPICAL OUTLINE.

- Administration of the state system.—Summarized statistics.—Current activities.
- Department of primary education: Laws controlling primary schools.—Statistics of primary schools, 1906-7: Table 1, number of schools, pupils, and teachers; Table 2, distribution of pupils between secular and clerical schools at specified dates.—Problem of school attendance: Table 3, results of special school census; juvenile courts.—Criticisms of the official programmes.—Provision for prolonging the education of the people: Higher primary schools, statistics (Table 4); relation between higher primaries and practical schools of commerce and industry; funds for promoting attendance upon higher primaries; agencies for the continuation of popular education.—Opinions elicited by an educational inquiry.
- Department of secondary education: Secondary schools for boys.—Statistics, current and comparative (Tables 5, 6, 7); inferences from the statistics.—Current discussions: The programme of 1902; opinions of professors as to the relative value of the several courses of study; conference on the state of literary studies; official instructions.—The new system of art instruction.—Public secondary schools for girls: Origin; progress; government appropriations; tuition fees and scholarship funds; relation of the schools to the higher education of women.
- Department of higher education: Institutions comprised in the department.—The state universities: Statistics, current and comparative.—Special schools of university rank.—Private faculties.—Scientific establishments.—Current movements pertaining to the state universities: The University of Paris; the provincial universities; distinctions between universities; means of stimulating the scientific activity of the universities.—Universities in their geographical relations.—Foreign activity of French universities.—Recent measures pertaining to the medical faculties; Paris faculty on administrative reforms.

ADMINISTRATION OF THE STATE SYSTEM.

The system of public instruction in France is at once a political instrument and a teaching agency. This dual character must be kept in mind in order to follow intelligently the record of any events pertaining to the service.

The head of the system is a cabinet officer, the minister of public instruction and fine arts. His control extends also in some measure to private institutions.

* For complete index to articles on Education in France in the annual reports of this office from 1889 to 1903, inclusive, see Report for 1905, Vol. I, chap. 4, pp. 57-58. For more recent articles see: Report of the Commissioner for 1905, Vol. I, chap. 4, pp. 57-86; chap. 5, pp. 87-95; 1906, Vol. I, chap. 11, pp. 19-34; 1907, Vol. I, chap. 4, pp. 127-167; 1908, Vol. I, chap. vii.

Within the system are comprised the three departments of primary, secondary, and superior instruction, each organized under its own chief or director.

It has been the policy of the Republic to give long tenure to the incumbents of these positions, thereby guarding the actual work of education from the evils of frequent and capricious change of direction.

The central administration includes a corps of inspectors-general, who report their observations directly to the minister, and the superior council, whose functions are advisory and judicial. The council consists of 60 members—one-fourth appointed by the President of the Republic and the remainder elected by their colleagues (professors and teachers). The term of service in this body is four years, but members are often continued for several terms.

The minister is assisted by a consultative committee—a commission of experts, as it were—chosen by himself from the highest officials in the service.

For local administration, the system is divided into 17 circumscriptions, called "academies." At the head of each academy is a rector, appointed by the President of the Republic. The rector is immediately responsible for secondary and higher institutions. He is assisted by an advisory council comprising the corps of academic inspectors and representative professors.

The departments (90 in all, including 3 in Algiers) are civil divisions which form within the academies districts for the administration of primary schools. The academic inspectors are, virtually, the superintendents of primary education; they are assisted by subinspectors appointed for each department.

SUMMARIZED STATISTICS.

According to the latest statistics pertaining to education in France, public primary schools, including infant schools, had an enrollment in 1907 of 5,106,200 pupils, and the corresponding private schools, which are subject to a certain measure of state supervision, an enrollment of 1,129,980. Omitting the infant schools, the enrollment in public primary schools was 4,583,053, and in private primary schools 1,001,972—that is, 5,585,025 children of legal school age attended school some portion of the year.

The public secondary schools for boys had an enrollment in 1908 of 96,289 pupils, and the private secondary schools for boys an enrollment of 64,558.

The public secondary schools and secondary classes for girls enrolled the same year 34,671 students. The state universities reported in January, 1908, an enrollment of 39,890 students. The attendance upon other higher institutions dependent upon the ministry of public instruction would raise this total to about 41,000.

For the expenses of the comprehensive system of public, or state, education the Government appropriated in 1908 the sum of 271,221,906 francs, equivalent to \$54,244,381. Of this amount 3,798,350 francs, or \$759,670, was for the direct expenses of administration, including the salaries of the minister and his clerical assistants; higher education received about 21,500,000 francs; secondary about

34,000,000. The larger proportion, 212,105,906 francs (\$42,421,181), equivalent to 78 per cent of the total, was appropriated for the expenses of primary education.^a

CURRENT ACTIVITIES.

The current year has been characterized in France by unusual activity in regard to education. It is noticeable, also, that this activity has been more marked in respect to purely scholastic problems than to those arising from the political relations of the system of public instruction which have long been uppermost.

The legislative contest between church and state, in which the question of the control of education was deeply involved, ceased for a time with the passage of the law eliminating the religious orders from the work, and the law providing for the separation of church and state. It has been recently charged that the clergy are using their influence to arouse antagonism to the state schools, and instances are cited which lend color to the accusation. On the other hand, several teachers have been accused of violating the principle of religious neutrality by criticisms of church and creed, offensive to the consciences of parents and opposed to the moral well-being of their children. These local excitements have been raised to national importance by the government "anticlerical bill," which provides that every manifestation publicly made in a church against the school shall be deemed an offense, under article 35 of the law of separation. The penalty for a clergyman guilty in this manner is imprisonment lasting from three months to two years; parents who attack the school are subject to a fine of from 11 to 15 francs, and for a second offense may be sent to jail for five days.

The effect of these disquieting incidents is modified by the increasing force of public opinion as a factor in religious and in political affairs. To this end tend the modernist movement in the Catholic Church and the increasing number of associations of teachers and professors, in which their respective interests are freely discussed. The federated associations of elementary teachers have manifested their sympathy with the methods of trade unions, and in 1907 were drawn into serious controversy with the minister of public instruction by the action of their secretary in signing a general protest on the part of syndicates (trade unions) against certain measures of the Government. The course taken by Minister Briand, in that case, is in accord with the programme foreshadowed by M. Clemenceau, when

^a The particulars respecting the appropriations for the system of public education and the detailed information given under the heads of the several departments of the service are derived chiefly from the reports on the budget for 1909, namely: Report to the chamber of deputies by M. Steeg, and report to the senate by M. Maurice-Faure.

he became premier. "As regards professional syndicates," he said, "the Government will propose to you to introduce into the law of 1884 the improvements which past experience has shown to be necessary. * * * The Government will submit to you a bill determining the status of civil servants. This bill, while granting them liberty of combination, and guaranteeing them against arbitrary action, will insure the steady accomplishment of their duty to the State, which is responsible for the public administrative services." As a consequence of the recent strike of the postal and telegraph employees, a bill of this kind, defining the rights and duties of officials, and at the same time providing for the correction of the wrongs of which they justly complain, has been pushed to the front in the Chamber of Deputies. As all teachers and professors in the system of public instruction belong to the civil service, their interests are involved in the measure.

It is significant that the syndical uprising is regarded by critical observers as a democratic protest against the evils of the excessive centralization of power under the present parliamentary system.

The educational movements of chief importance during the year have been determined by conditions pertaining to the distinct departments of education—primary, secondary, and superior—and may best be presented under these separate headings. Even in their technical aspects, however, these movements show a common tendency toward the freer expression of private and professional opinion, a tendency, analogous to that which, in the world of industry, seems to be working also toward a readjustment of forces in public and institutional life.

DEPARTMENT OF PRIMARY EDUCATION.

LAWS CONTROLLING PRIMARY SCHOOLS.

Primary schools are maintained and controlled in accordance with a series of laws pertaining to this division of the general system of education. Chief among these is the law of 1833 making it obligatory upon the communes to provide a school, either public or subsidized private; the law of August 9, 1879, placing upon each department the obligation to maintain two primary normal schools, one for men, the other for women; the law of June 16, 1881, making primary public instruction free; that of March 28, 1882, making instruction compulsory for all children of the ages 6 to 13 years; and the law of October 30, 1886, determining all details as to the conduct of primary

schools, and forbidding the future employment of clerical teachers in public schools.

The salaries of teachers, which are paid by the State, and the conditions of their promotion are regulated by laws of July 19, 1889, July 25, 1893, March 1 and December 30, 1903, and April 22, 1905. The local school tax is paid into the state treasury; all the obligatory expenses of primary schools, except for site and building, are borne by state appropriations.

The law of July 1, 1901, regarding associations, the refusal by Parliament in 1902-3 to authorize the continuance of the teaching orders, and the law of July 7, 1904, ordering the suppression of all the teaching orders within a period of ten years, apply equally to the three departments of the system.

In accordance with recent legislation, teachers belonging to the various religious orders have been practically eliminated from the public schools. In 1908 only 400 such teachers were still retained in the total force of 115,000.

As regards private elementary schools, it is reported that between July 1, 1901, and June 1, 1908, there were closed by order of the Government 16,079 clerical schools; of these, 2,719 were schools for boys and 13,360 for girls. There still remained at the last date named 94 clerical schools for boys and 1,044 for girls. During the period specified (July, 1901, to June, 1908) 2,018 private schools for boys and 7,397 private schools for girls were opened. The majority of these are former clerical schools transferred to lay managers.

The distribution of pupils between the various classes of primary schools, as shown in Table 2, illustrates the effect of the measures referred to.

TABLE 1.—*Statistics of primary schools, 1906-7.*

Class of schools.	Number of schools.	Number of pupils.	Teachers.
Infant schools (ages 2-6):			
Public.....	2,613	523,147	6,548
Private.....	1,498	128,008	2,003
Total.....	4,111	651,155	8,531
Primary schools (elementary, ages 6-14; higher, ages 12-16):			
Public—			
Boys and mixed.....	45,139	2,470,981	57,771
Girls.....	23,441	2,112,072	57,736
Private—			
Boys and mixed.....	3,285	337,342	8,274
Girls.....	9,787	664,630	28,133
Total.....	81,653	5,585,025	151,914
Primary normal schools:			
For men.....	86	4,971	.....
For women.....	41	5,156	.....
Total.....	127	10,127	.....

TABLE 2.—*Distribution of pupils between secular and clerical schools at specified dates.*

Class of schools.	Pupils.		Percentage of increase (+) or decrease (—) 1902-3 to 1906-7.
	1902-3.	1906-7.	
Secular:			
Public.....	4,159,712	4,542,531	+ 9.2
Private.....	276,035	814,281	+ 195
Clerical:			
Public.....	149,383	40,522	— 72.2
Private.....	967,632	187,691	— 415

PROBLEM OF SCHOOL ATTENDANCE.

In the department of primary education the attention of the Government during the past year has been directed chiefly to the means of enforcing school attendance. In accordance with the law of March 28, 1882, which made primary instruction obligatory for all children between the ages of 6 and 13, choice of means being left to the parents, a local committee is formed in each commune to look after the matter of school attendance, and the mayor of the commune, who is a member of this committee, is required to notify all parents of the date assigned for the opening of the annual school session and to warn parents and guardians who violate the compulsory provisions of the school law. The penalty for such violations is a fine ranging from 11 to 15 francs (\$2.20 to \$3) and imprisonment for four or five days. It is admitted that the law is a dead letter in many communes, and the number of children not attending school or attending irregularly appears to be increasing. The annual examination of conscripts and the observation of persons who have occasion to sign the civil registers confirm this impression.

In a circular on the subject addressed to the local inspectors, October last, the minister of public instruction states that in 1906 and 1907 more than 11,000 conscripts were reported as totally illiterate and 5,000 more who could only read a little. These statistics are perhaps not absolutely correct, but they are sufficiently so to occasion alarm. They show that while the Republic accomplished a great work in reducing the percentage of illiteracy from 17 per cent to 4 per cent in twenty-five years, there has been an arrest of progress since 1900. This appears to be due to a residuum of ignorance which can not be reached by the ordinary school provision. It comprises the children of the poorest classes, nomads, abnormals of all classes, and the inhabitants of isolated regions where families are scattered and the means of communication are very bad. In view

of these conditions, a bill is before the legislature dealing with the subjects of compulsory school attendance and with the organization of the means of popular education beyond the brief period of the elementary school. Meanwhile inspectors are directed to use every effort to ascertain the extent and causes of neglect of school attendance in their districts, to inspire teachers with renewed enthusiasm, and to induce municipalities to lend moral and material assistance in the work.^a

The matter was urged upon the attention of the Chamber of Deputies by M. Steeg, chairman of the committee on the budget, in submitting the estimates for 1909. With respect to the alarming outlook, M. Steeg said: "While in Germany and in Switzerland there is not one illiterate in 200 inhabitants, in France, out of every hundred young men, four or five can not read, and out of every hundred young women, six or seven are absolutely illiterate. That is, the total ignorance is ten times greater than in the neighboring countries."

There has been no complete school census for several years, so that the number of children subject to compulsory education has been for some time a matter of conjecture. The minister of public instruction recently ordered a special inquiry upon this point, the results of which are shown in Table 3.

It will be noticed that the total number of children present in the public primary schools the day the enumeration was made is nearly 1,000,000 (exactly 979,789) less than the total enrollment (4,583,053) in those schools for the year, as shown in Table 1. This discrepancy arises in part from the shifting of pupils, in times of religious agitations, from public to private schools, and in part from duplications in the record of the year's enrollment. It emphasizes, however, the facts brought out in regard to absentees.

^a Bulletin Administratif du ministère de l'instruction publique, 1908, No. 1852 (November 14), pp. 820-823.

to support the opinion already expressed in legislative debates on the subject that a comprehensive system of relief must be maintained if the children of the poorest classes are to profit by the provision of free schools. The basis of such a system exists in the fund which every commune is required by law to maintain for the assistance of poor children; but the law is not everywhere regarded, many communes are unable to provide such a fund, and, in general, the system needs to be reorganized.

SPECIAL COURTS FOR JUVENILE OFFENDERS.

It is interesting to note in this connection the bill before the French Chamber of Deputies having for its purpose the reclamation of young offenders by the creation of special tribunals to deal with them, and by the substitution of liberty under surveillance, instead of imprisonment, for minors convicted of misdemeanors. In the eighth correctional tribunal of Paris it has been the practice for the last two years to take all the cases of young offenders on Mondays. Following this example, the bill referred to proposes a special court for juveniles in every *arrondissement* having at least 100,000 inhabitants in its chief city. The underlying principle of the measure is the postponement of the actual punishment in order to provide an opportunity for reformation. The penal law recognizes 18 years as the age of majority, but this long minority divides naturally into two periods—the years below 13 and those above. Every offender under 13 will be regarded as irresponsible and, whenever it is possible, will be remanded by the special court to the custody of his parents, and they will be obliged to support him. So long as the period of tutelage lasts the morals of the offender will be supervised either by some charitable association or by some competent individual. Ultimately, if the youth conducts himself well, he may be released from all direct supervision; but if he should continue on the downward path, the sentence which has been pronounced provisionally will become operative.

Regret is expressed that it is not at present practicable to urge the appointment of special judges for the children's courts, after the American plan. It is, however, provided that the judges assigned to these courts shall not be subject to the customary annual rotation. They will hold the same seats long enough to become specialists in the delicate matters assigned to them.^a

CRITICISMS OF THE OFFICIAL PROGRAMMES.

The renewed solicitude with respect to the matter of school attendance has excited close scrutiny of the official course of instruction for primary schools. This is criticised as too ambitious and too bookish.

^a For an interesting account of this measure, introduced into the Chamber of Deputies by M. Deschanel, see *Les Tribunaux pour Enfants*, by Louis Delzons, *Revue des Deux Mondes*, June 15, 1909, pp. 885-902.

It forces upon children information and ideas remote from their experience and stage of development, and results too often in absurd associations of facts, historic and scientific, such as are constantly occurring in the examinations. These confused notions indicate, not so much stupidity on the part of the pupils as radical mistakes in the methods and scope of the instruction. Their correction would be found in the simplification of the programmes—in history, by the choice of the principal national events; in science, by the presentation of a few elementary notions related to matters of familiar observation and easily illustrated in class. In the opinion of M. Steeg, oral instruction has been carried to excess. "It is necessary," he says, "to restrain the passion for oral instruction, which forces the children to listen to so many vain words constantly forgotten and distorted and often not worth remembering." He continues:

The principal effort of primary instruction, after the exercises absolutely necessary to form the habit of observation and the use of language, should be to enable the pupils to read easily and intelligently. Is it not probable that the greater number of young people who, at 20 years of age, are unable to read would have retained the ability if they had read more often in school, instead of listening to lessons soon forgotten or struggling with difficult exercises in grammar and arithmetic? Is not reading the surest means of acquiring the indispensable elements of history, science, and grammar? * * * Because the book was formerly abused by making it a mere instrument of mechanical reading, it should not to-day be discarded as useless.

Books speak a language more precise, reliable, profound, and more moving than that used by the majority of teachers. They contain the treasure of knowledge and experience acquired by the human race. It is not pretended that this intellectual and moral treasure can be imparted to every pupil, but it is possible to give everyone the key to it, to make it familiar to him, and to excite his interest in it. Then when he leaves school, although he may forget much that he has learned there, he will have a taste for study and will possess the essential means of learning.

PROVISION FOR PROLONGING THE EDUCATION OF THE PEOPLE.

Intimately connected with the subject of compulsory school attendance and the simplification of the elementary programme is that of provision for continuing the instruction of the young who have passed the compulsory school age. The neglect of the masses of adolescent youth is one of the chief evils with which the Republic has to contend. The majority of the children quit school at the very moment when they have most need of restraint and guidance, and when their minds could profit most by instruction and their characters by good counsel. The higher primary schools, intended for children 12 to 15 years of age, offer the best means of continuing the formal instruction of the people, but few children of the laboring classes enter these. In 1907 the total enrollment in public schools of this grade was 44,577, viz, 25,363 boys, 19,214 girls. A large proportion of these

pupils were preparing for admission to normal schools or for the lower grades of the postal, telegraph, tax office, and other branches of the civil service.

The following table brings into comparative view the enrollment in the higher primaries for specified years:

TABLE 4.—*Statistics of higher primary schools for specified years.*

Year.	Schools for boys.				Schools for girls.			
	Number.	Enrollment.	Teachers—		Number.	Enrollment.	Teachers—	
			Having professor's diploma.	Assistants.			Having professor's diploma.	Assistants.
1889.....	197	17,551	.....	.....	73	5,000	.....	.....
1899.....	208	21,264	671	354	92	10,515	275	123
1904.....	221	26,978	563	473	110	15,383	281	179
1905.....	225	27,523	641	446	122	16,660	297	223
1906.....	229	27,807	651	473	130	18,507	307	270
1907.....	238	28,363	647	542	139	19,214	324	308

RELATION BETWEEN HIGHER PRIMARIES AND PRACTICAL SCHOOLS OF COMMERCE AND INDUSTRY.

The practical schools of commerce and industry, which have been differentiated from the higher primary schools, draw pupils from the same social class. These schools are increasing rapidly in number and in attendance; whereas in 1899 they enrolled only about 3,000 pupils, in 1906 their enrollment was 9,767, of whom 7,745 were boys, while in 1907-8 the total number of schools reported was 60, with an enrollment of 26,920 pupils.

This early division of schools on industrial lines is criticised in many quarters as tending to narrow the intellectual outlook of the youth of the laboring classes and to prevent the development of social sympathies and common aspirations. The schools of commerce and industry, it is declared, do not answer the same purpose as actual apprenticeship, and the decrease in the amount of time given to the usual branches of study results in a distinct loss in the intellectual alertness of the pupils. A member of the superior council of technical instruction says on this point—

the pupils who have received methodical, scientific, rational, and progressive instruction, to whom has been given a fund of general knowledge, may not be able to compete at once with specialized apprentices, but in compensation they are much better able to adapt themselves to the business as a whole. It can not be denied that after a little practice on their part comparison is out of the question; the unfortunate apprentice who has not received scientific training is completely eclipsed.

The same authority adds:

After thirteen years' experience in technical education I have come to the conclusion that it is too feeble on the side of general education as compared with practical training. As industry develops it is more and more necessary that the brain of the workman should be more developed than his hands. * * * In the shop, the workman who stands in the first rank is the one whose knowledge is ever increasing.

In view of these and similar statements by experts, M. Steeg expresses the opinion that one class of higher primary schools should be recognized, with varying adjustments of theoretic and manual or industrial training, to be determined in each case by local conditions. He says:

It is a fact—and a fortunate one—that the great industries and vast commercial enterprises do not absorb all the resources and activities of our country.

Excessive specialization is not necessary in the villages and towns where merchants, artisans, and even agriculturists themselves need versatility and general knowledge in order that they may be able to manage all the various details of their complex tasks. They are at once commercial factors, accountants and manufacturers, workmen and directors. They constitute the wealth of our country and assure its rapid, pacific, and lawful evolution. The instruction which is imparted in the higher primary schools corresponds exactly to the needs of this large and important part of the French population.

Against the above opinion it is interesting to consider that expressed in the report on the estimates for the ministry of commerce and industry, to which pertain the practical schools of commerce and industry. The author of this report, M. Clémentel, says:

Comparing the time tables and programmes of the practical schools with those of the industrial and commercial sections of the higher primary schools, it will be seen that great differences exist between the two classes of institutions. The conclusion seems inevitable that the practical schools equal the higher primary schools in respect to general education, and that they are very much superior to the latter in regard to technical instruction because they are better equipped and specially organized for this work. Under these conditions, it would seem that in this country, which owes its wealth in great part to its commerce and its industry, the practical schools ought to hold the chief place. Unfortunately there are only 60 of these schools with 11,506 pupils in 1907-8, while there are 221 higher primary schools with an enrollment of 26,920 pupils.

There is, however, according to M. Clémentel, good ground for believing that in a few years, if the Government is allowed the appropriation necessary, this technical education will have very great extension. In the past two years 6 schools have been created in as many cities, and 26 cities have recently entered into negotiations with the ministry of commerce and industry with a view to the establishment of schools of this character.^a

It is interesting to note in this connection that the practical schools of commerce and industry, referred to above, illustrate an

^a See report on the budget for 1909, Ministry of Commerce and of Industry, by M. Clémentel, deputy, p. 105.

endeavor of the French Government to meet a demand somewhat similar to that which is just now exciting in our own country the widespread discussion of vocational education. The demand in France grew out of the unsatisfactory condition of French industry as revealed in the Paris Exhibition of 1878. Attention was called to signs of a decline in the technical qualities of workmanship there displayed, a decline that was attributed to the want of provision for the technical training of the great body of the workmen. The agitation of the subject went further than a consideration of manufactured articles and included the status of French commercial agents and clerks as compared with those of other countries. The final outcome of the efforts thus excited was an endeavor on the part of the State to organize a system of primary technical instruction which, after many years of experiment in administration, has at last been placed under the sole charge of the ministry of commerce. The system of schools referred to includes, in addition to those just named, five state institutions of wider scope, the *écoles nationales professionnelles*.^a

The recent official programmes of secondary schools (*lycées* and colleges) duplicate to some extent those provided for the higher primaries. This duplication, and the rivalry of the higher primary and the practical schools, explain the growing demand for a reclassification of public schools and colleges for both economic and educational considerations.

FUNDS FOR PROMOTING ATTENDANCE UPON HIGHER PRIMARY SCHOOLS.

The importance of inducing young people of ability to continue their studies beyond the brief period of the elementary school has always been recognized by the Republic, and a system of public bourses (scholarship funds) is maintained for this purpose.

In addition to the ordinary funds of this character, appropriations are made for a special class of bourses which enable the recipients to pursue their studies in a foreign country. Both pupils and teachers may be candidates for these special bourses, for which, in 1908, there were appropriated 54,000 francs (\$10,800). The number of recipients was 18, of whom 7 were professors in primary normal schools, and 11 were former pupils in higher primary schools. The bourses available in foreign countries are intended for persons who expect to teach the respective languages or to make use of them in business. The total appropriation by the Government in 1908 for the several classes of bourses pertaining to the department of primary instruction was 750,000 francs (\$150,000).

^a For a full account of the system of technical education in France, see Report of the Commissioner of Education for 1897-98, chap. 16, pp. 709-749; for typical programmes of the practical schools of commerce and industry, see Report of the Commissioner for 1903, chap. 13, pp. 609-10.

AGENCIES FOR THE CONTINUATION OF POPULAR EDUCATION.

Reference has already been made to the bill at present before the legislature providing, among other matters, for the organization of the means of popular education auxiliary to the school. This work of continued education is carried on by various agencies in France, chiefly of private initiative, but fostered by public appropriations. The following details indicate the variety and extent of the efforts in this direction.

In the year 1907-8 the courses of instruction for adults reached their highest number, 48,565 (30,271 for young men, 18,294 for young women). This is a gain of 317 over the previous year and a gain of 8,000 over the number reported in 1900. The number of persons enrolled in the classes was 533,676, of whom 404,419 attended regularly.

Public lectures, given by university men who know how to present information in popular form, are constantly increasing in number. The lectures differ from the popular conferences in which the auditors participate in the discussion of the subjects presented. The latter, which reached a total of 82,481 in 1907-8, have the benefit of stereopticon views furnished by the Musée Pédagogique and by the Ligue Française de l'Enseignement.

The so-called popular universities (*universités populaire*), which are assemblies for the spread of political and social theories, are on the decline; only 49 meetings were reported for 1907-8.

Under the head of social works are included the *mutualités scolaires*, or school mutual-aid societies, which encourage thrift and the spirit of helpfulness among the young. These societies number 3,133, with 753,022 members. The contributions for the year reached 4,000,000 francs (\$800,000), of which about one-fourth was paid in by pupils who drew relief during days of illness.

The school patronages, or associations formed in the interests of young people 13 to 20 years of age, numbered 2,129, of which 829 were for girls and 1,300 for boys.

The expenditure for these various activities, directed to the intellectual and social development of youths and adults, is provided for by private donations, subscriptions, and fees, and by public appropriations, local and state.

The amount realized in 1907-8 from private sources, including membership subscriptions in the societies engaged in the work and the fees paid by attendants, was 2,547,000 francs (\$509,400). The public appropriations were as follows: By the municipalities, 1,631,214 francs (\$326,242); of this amount 341,209 francs (\$68,241) came from Paris; by the departmental councils, 59,175 francs (\$11,835); by the State, 700,000 francs (\$140,000). The total from

public sources was thus \$546,318, or about \$37,000 more than the amount from private sources.

OPINIONS ELICITED BY AN EDUCATIONAL INQUIRY.

In view of the deepening conviction that the school should be better adapted to the present conditions of society, the Manuel Général conducted an extended inquiry during the year for the purpose of securing nonprofessional opinions on the subject. Parents, directors of large industries, associations of workmen, all were asked to take part in this symposium. The following considerations are drawn from a summary of the replies by M. F. Buisson, with whom the inquiry originated.

The opinion is very generally expressed by the correspondents that primary education should be more practical, more concrete, more living, that is, less bookish. To this end many advise that the course of instruction be varied, adapted in each case to local conditions or to the diverse vocations, agricultural, commercial, or manufacturing, for which the pupils are destined. With this view M. Buisson himself agrees, provided that this new rôle be reserved for the second stage of primary education, that is, for pupils 12 to 18 years of age, and not attempted with those 7 to 11.

The most important considerations brought out by the correspondence relate to the "to-morrow of the elementary school." It is generally agreed that the obligatory school period should be prolonged. It is significant that the representatives of the trade unions insist strongly upon this course. It is impossible, they say, to make a boy a good apprentice at 12 years of age; if this is attempted, he generally becomes merely a little servant to the employer.

It is urged, also, that the time has come for the organization of "a second obligatory instruction, that of adolescence." On this point there is striking unanimity in the replies. The interests of national industry demand, it is said, that technical training should not be reserved for a privileged few, but brought within the reach of the hundreds of thousands that make up the army of industry in France. "What our neighbors to the east of us have accomplished by this course," says M. Bisson, "makes further demonstrations unnecessary."

Finally there is general agreement that the education of adolescents should not be imposed upon the teachers of the ordinary elementary schools. With full appreciation of the service that the teachers have already rendered in this respect, it is recognized that an organized system of popular education, complementary to that of the school, would require a special corps of instructors, experts in the several industries toward which the training should be directed, and at the same time, competent and trained teachers.^a

^a Manuel Général, Vol. XLV, No. 27, pp. 401-403.

DEPARTMENT OF SECONDARY EDUCATION.

Secondary education in France forms a distinct administrative department in the ministry of public instruction, comprising the state lycées and communal colleges for boys and the institutions for girls, which latter have the same names, although differing entirely in their course of study.

SECONDARY SCHOOLS FOR BOYS.

The typical secondary schools are the lycées for boys, established by the State with the concurrence of the municipalities. Every effort is made by the Government to attract to these schools the most promising youth of the nation, and to surround them with influences that shall insure their devotion to the Republic. The solicitude of the Government in this respect has been greatly increased by the prestige of the private secondary schools, which have long flourished under clerical direction, and which are still in vigorous activity under new conditions resulting from the repression of the teaching orders.

The communal colleges follow nominally the same programmes as the lycées, but, as a rule, do not maintain the complete secondary course of study. Under recent regulations, the colleges are assuming more and more the character of local high schools similar to the higher primary schools. The lycées and colleges have, as a rule, both boarding and day pupils. The household régime of the lycées is strictly regulated by official orders; that of the colleges is either under municipal control or left to the principal as a private undertaking. In the latter case the college is subject to the evils attending poor, unendowed, boarding schools, aggravated by the presence of professors independent of and often at variance with the principal. There are indications that the local colleges and the higher primary schools may gradually be merged into one, save where there is demand for a regional boarding school, liberally supported and amply equipped for the full course of secondary education.

STATISTICAL SUMMARY OF SECONDARY SCHOOLS.

In 1908 there were 111 lycées for boys and 229 communal colleges, having a total registration of 96,289 students, as against 96,462 in 1907. Table 5 shows the number of students in the lycées of the Paris Academy as compared with the number in the provincial academies. Table 6 presents the corresponding statistics for the communal colleges. Table 7 brings into comparative view the enrollment in the different classes of secondary establishments, public and private, for specified years.

TABLE 5.—*Enrollment in lycées for boys.*^a

Location.	Students, November, 1908.		
	Total.	Boarders, full or partial.	Day students.
Continental France:			
Paris—			
City	12,176	2,880	9,296
Departments	2,859	980	1,879
Provincial academies ^b	42,275	13,066	31,437
Algiers	2,688	760	1,928
Total	59,998	17,686	42,312

TABLE 6.—*Enrollment in communal colleges for boys.*

Location.	Students, November, 1908.		
	Total.	Boarders, full or partial.	Day students.
Continental France:			
Paris	5,348	2,288	3,060
Provincial academies ^b	29,489	10,254	19,235
Algiers	1,454	312	1,142
Total	36,291	12,854	23,437

^a Report by Maurice-Faure, 1909, p. 217, 218.^b Divisions for educational administration.TABLE 7.—*Distribution of students among the different classes of secondary schools for specified years.*

Class of institution.	Number of students.				
	1899. ^a	1901. ^b	1905. ^c	1907. ^d	1908. ^d
Public:					
Lycées	52,708	54,830	60,211	59,783	59,998
Communal colleges	32,891	33,872	34,954	36,679	36,291
Total	85,599	88,702	95,165	96,462	96,289
Private:					
Under lay management	10,182	.....	13,813	21,248	19,935
Under clerical management ^e	68,825	67,872	49,938	43,327	44,623
Total	79,007	.....	63,751	64,575	64,558
Grand total	164,606	.....	158,916	161,037	160,847
Per cent of total in public secondary schools	52.0	.....	59.8	59.9	59.8

^a Report on the budget.—Service of public instruction, 1901, by M. Perreau, pp. 69, 70.^b The same, 1902, by Maurice-Faure, pp. 443–445.^c Statesman's Year Book, 1909, p. 751.^d Report on the budget.—Service of public instruction, 1909, by Maurice-Faure, pp. 216–218, and Statesman's Year Book, 1909, p. 751.^e Under recent changes, the petits séminaires, clerical schools preparatory for theological schools, have lost their distinctive character in France. The enrollment in these preparatory schools was 23,000 in 1899 and 22,328 in 1901.

INFERENCES FROM THE STATISTICS.

The particulars concerning the student body brought out in the foregoing tables are followed with intense interest by the Government because of the rivalry of the private secondary schools. It appears that there was a decrease of 173 pupils in the total registration in the public secondary schools in 1908 as compared with 1907. This loss was wholly in the colleges, the lycées having gained 215 pupils. The detailed statistics bring out the fact that the number of boarders in the lycées decreased by 346 as compared with an increase of 561 day students. The colleges lost both boarders and day students, viz, 144 and 241, respectively. The opinion is expressed that the slight decline in the enrollment of the public secondary schools results from other causes than the superior attractions of the private schools. Among these causes are noted, in particular, the stationary or declining population, the steady increase in the number of pupils attending the higher primary schools, and the multiplication of technical schools, which attract ever-increasing numbers from the middle classes. In view of these conditions, it appears that the term "secondary education" must be used to include varied types of schools. It has already been suggested in the Chamber of Deputies that in order to form a fair estimate of the extent of public secondary education and of the appropriations required for its support, the statistics of the traditional secondary schools and those of the higher primary schools and the technical schools of secondary grade should be included in one category.

CURRENT DISCUSSIONS.

The current discussions of secondary education center in the reform programme authorized by official decree of July 20, 1901, which went into operation in 1902. The decree modified both the internal regimen of the secondary schools (lycées) and their scheme of study. It is in the latter respect only that its results bear upon problems of universal interest. As in other European countries which follow the French classification, the term secondary education, in France, implies a complete course of general education, beginning at a very elementary stage and terminating with the bachelor's degree. After this, there remain for the student only the specialized courses of the university or the great technical schools, all of which are distinctively professional. The French scheme of secondary study covers, therefore, the work of the American high school with about two years of the course of our leading colleges.

THE PROGRAMME OF 1902.

Following a preparatory course of two years (intended for pupils 7 to 8 years of age), the lycée course proper is divided into two

cycles: The lower cycle covers four years and comprises a classical course and a nonclassical course; the upper cycle comprises three years. The programme for two of the three years is arranged in four parallel courses, as follows: (A) Classical course; (B) Latin and modern languages; (C) Latin and sciences; (D) sciences and modern languages. Following these two years is the class of philosophy and mathematics, each side comprising a classical and a non-classical section. The bachelor's diploma is awarded to students who complete either one of the full secondary courses of instruction and pass the degree examination.^a

OPINIONS OF PROFESSORS AS TO THE RELATIVE VALUE OF THE SEVERAL COURSES OF STUDY.

The new programme has been in operation seven years, or the full period of the lycée course; hence, a considerable body of students have pursued their studies under its requirements. The current criticisms of the system have, therefore, a basis in experience. They reflect, moreover, conclusions reached from entirely different stand-points. Professors wedded to the old system of a single course with limited electives are found in agreement with young professors who at first welcomed the radical change. Parents are dissatisfied, the press has been full of the subject, and special meetings have been called under distinguished auspices, to discuss the apparent decline in scholastic standards and attainments. An examination into the actual working of the programmes was undertaken in 1907 by the Société pour l'Étude des Questions d'Enseignement Secondaire. Circular letters were addressed to leading professors of secondary education presenting specific questions under two main considerations, namely, that of the present state of literary studies in secondary education, and that of the general state of studies in the classes of letters, as indicated by the attainments of the students in the languages studied, by their general development, and by their power of attention and of concentrated effort.

The correspondents, by a large majority, give preeminence to classical studies as the instruments of mental discipline and culture; at the same time, there is an evident preference for the combination of Latin and sciences over Latin and the living languages.

As regards the entire scheme of study with its parallel courses and divergent aims, the opinions brought out by the inquiry are summed up in a few words: Overcrowded programmes, varied and often contradictory purposes, and precocious specialization. This view of the situation is emphasized by citations from individual professors.

^a For the full programmes of 1902, see Reports of the Commissioner of Education: 1902, Vol. I, pp. 687-693; 1907, Vol. I, pp. 149-150.

One professor observes:

It seems that secondary education would be in danger of becoming inferior to that given in the higher primary schools, unless it rests upon a solid basis of the study of Latin and Greek continued from the lower class, sixième, by means of the principal works (grammatical and literary) which make up a course of literary studies.

Another writes:

The classical studies have been declining for some time. To-day the word which designates them is merely a euphuism, a sad irony. Few pupils in Latin master the elements of the grammar, the greater part translate poorly, the compositions are often a mere tissue of platitudes.^a

The highest class of the lycée, i. e., philosophy and mathematics, was not particularly affected by the programme of 1902, and consequently the opinions of the professors of this class, on the questions submitted, are formed entirely from their observation of the students who come up from the different lower sections.

The professors of philosophy who replied to the circular inquiry complained of the lack of maturity, of judgment, and of reasoning power, and even of the orthography of the students who come to them. For the part of the course which is common to the classes of mathematics and philosophy, and particularly for the study of scientific methods, it is declared that the students who have followed the classical sections seem to be entirely wanting in comprehension of scientific principles. In this respect they are inferior to the students from the scientific section. This is attributed to the practical elimination of the sciences from the classical sections.

One professor observes:

I would not say that it is desirable to increase the time given to science in those sections, but it is very important that the course should be so organized that the students may comprehend what science is, what the scientific spirit is, and what are the methods of thought required by scientific research. The little that they now acquire in these respects comes chiefly from the instruction in history; it would seem that the professors of science in the classes of letters might form a conception of their subject at once more philosophic and more truly educative.

This opinion illustrates the great change that has taken place in the conception of philosophy itself. Formerly the class of rhetoric was regarded as the best preparation for this study; to-day it requires that habit of mind which is promoted by the sciences, especially the sciences that lend themselves to mathematical expression. This idea is brought out by several professors who agree that the time seems to have come "when philosophy should no longer be considered as a continuation of the class of rhetoric."

^a See *L'Enseignement secondaire*. Organe de la société pour l'étude des questions d'enseignement secondaire, Nos. 11, 12, 15-20, 1908.

CONFERENCE ON THE STATE OF LITERARY STUDIES.

On account of the widespread conviction that literary culture and ideals are declining under the new system, a conference was called at the Musée Pédagogique by M. Liard, vice-rector of the Paris Academy,^a to consider "the crisis in the methods of instruction in the French language." The conference, which convened in January of the present year, was opened by Professor Lanson, of the Paris Faculty of Letters, with an analysis of the conditions that have brought on the crisis. Professor Lanson dwelt upon the decline in the attainments of the students as shown by the results of the university examinations, and upon the evidences of a general lowering in the standards of the language as indicated by the small proportion of classic dramas brought out in the Paris theaters, and by the style of current literature.

There are causes for this decline quite apart from the curriculum and methods of the schools. Among these Professor Lanson mentioned in particular the increasing number of reviews and journals, which tend to destroy the taste for serious reading, and the enormous interest in scientific and economic questions. This interest has altered the home atmosphere around the pupils, so that they no longer bring to their studies the old literary prepossessions. An additional cause of change in the student body is due to the fact that many families which formerly patronized the public secondary schools are sending their boys to private schools, and the places thus vacated are filled with pupils from an humbler class. Despite the originality, vigor, and mental keenness displayed by many of the latter, a large proportion of them are in the primary stage of development.

To these causes, all of which have their influence upon formal instruction in language and literature, are added the increased difficulty of treating the subject on account of the great range of literature with which the students are expected to become familiar and the changed direction of the study. With reference to the last consideration, Professor Lanson says, substantially:

Formerly the entire literary instruction was directed to general culture, designed to awaken the interest of pupils in varied matters, many of them not exclusively literary, as ethics, history, philosophy, art. For the last thirty years, under a pressure which the professors have not been able to resist, the instruction in French has become more and more a specialty, essentially a critical and historical study. The forms of literary works, their esthetic character, the doctrines of literary schools are studied. * * * With this critical and historical study of literature, the instruction preserves also a psychologic

^a The Academy of Paris, the largest division of the French system of public instruction, includes the University of Paris, the special schools of university rank, lycées and colleges, and primary schools. The nominal rector is the minister of public instruction; the virtual chief of this academic district is the vice-rector.

character. And as the psychologic study of great works has been carried to an extreme, the professor who wishes to put his personal mark upon his instruction is led into an excess of subtle analyses out of all proportion to the culture and mental maturity of his pupils. Thus, while the students of Latin and Greek find themselves still upon solid ground, since the interpretation of classic texts gives them material to seize and work upon, in respect to French they have the feeling that it is the region of the vague, the field for the exercise of the brilliant fantasy of the professor.

In view of the conditions set forth, Professor Lanson expresses the opinion that one of two courses is inevitable. Either (1) the higher culture must be reserved for an élite class, to be selected by rigorous tests, upon merit alone, and the greater part of the secondary schools be transformed into higher primary schools adapted to those of inferior ability, or (2) the standard of secondary education must be lowered.^a

In succeeding sessions of the conference the methods applied to different divisions of the literary programme were discussed by professors representing each. Particular interest attaches to the matter of composition, which has always been an important exercise in the lycées. According to Professor Rudler of the Lycée Charlemagne, Paris, the loss of definite methods and aims upon which Professor Lanson dwelt has had a very decided effect upon the teaching of composition. These qualities were promoted by the annual competitions formerly held in Paris, in which the ablest students from all the lycées participated. Uniform requirements in well-known forms of composition—the letter and the essay—controlled the preparations. The subjects assigned were drawn from morals, history, politics, and literature, the latter particularly after 1867. Since this exercise was discontinued, there has been no common plan of instruction. The change in this respect is regretted by some professors, approved by others.

"This formal discipline," "the type of education by general ideas and analogies," as it is called by Professor Rudler, was the only one possible before scientific studies and methods developed; "they represent," he says, "in the history of education what Cousinianism represents in that of philosophy." But a new type is now necessary, corresponding to that study of reality which the age demands. "Education," he adds, "can not refuse to follow this movement." Professor Rudler's suggestions, as to the changes in the composition exercises that this necessity occasions, reduce to the choice of different subjects, greater precision in the use of words as befits the presentation of ascertained facts and the record of observations, and greater freedom in the general plan of the composition.

^a For report of the address by Professor Lanson see *L'Enseignement secondaire*, February 1, 1909, pp. 45-47.

In the discussion which closed the conference, the majority of the professors present agreed that the falling off in the literary attainments of the students had been exaggerated. It was also suggested that the changes in the composition exercises, advised by Professor Rudler, are gradually taking place without the intervention of official orders.

OFFICIAL INSTRUCTIONS.

As a result of the conference, special instructions pertaining to the subject were issued in February of the present year to the academic rectors. In the circular letter accompanying the instructions, the minister of public instruction recalled that at the beginning of 1908 the general inspectors were charged to devote chief attention to the matter of instruction in the French language and literature. The new instructions, drawn up in accordance with the advice of the inspectors and that of representative professors, are intended to promote conferences on the part of the professors of the French language and literature, and to bring about closer relations between them and the examining boards in order that the baccalaureate examination, which is the goal of secondary education, may be kept in accord with the scheme and general purpose of the literary course prescribed by the programmes of 1902. Similar directions, it is said, with reference to the scientific course, have already produced excellent results.^a

THE NEW SYSTEM OF ART INSTRUCTION.

In the scheme of liberal education as maintained in France, art enters as an integral factor. Great significance attaches, therefore, to the *arrêté* of January 6, 1909, which provides for a change in the system of art instruction in the lycées and colleges, the same to go into effect in October next. The change is complete in both principle and practice. Disregarding the traditional questions of the essence of things and a preconceived logical ideal, the fundamental consideration in the new system is that of the pupil's own interest. Pencil and paper are put into his hands in order that he may reproduce whatever attracts and pleases him. In other words, the basis of the system is psychological. The instruction consists in showing the pupil the faults in his representation, and thus leading him to the habit of exact observation, to the perception of proportions and the estimate of distances, and to the gradual mastery of the technic of art. The purpose kept in view is the development of the individual, not the formation of artists.

^a See *Bulletin administratif du ministère de l'instruction publique*, 1909, No. 1866 (February 27), pp. 384-386.

The change from the geometric system of drawing, formulated by the sculptor Guillaume, and officially adopted for the lycées and colleges in 1880, to a system in which natural forms and color harmonies furnish the models, is the outcome of long-continued efforts on the part of artists and professors of art. In 1897 an association of Paris teachers of drawing was formed to advocate reform in this branch, and a magazine, the *Moniteur du Dessin*, was founded as the organ of this body. The movement received fresh impulses from the International Congress on Art Instruction held in Berne in 1904, and the succeeding congress held in London in the summer of 1908.

In accordance with the urgent representations of the professors of drawing, the minister of public instruction appointed a commission of experts in 1908 to investigate the subject; the new scheme embodies their recommendations.

In principle, in the sequence of subjects, in the methods and material indicated, the new course of art instruction in France is in striking agreement with that followed in the leading cities of this country and with that adopted a few years ago for the schools of Prussia. The only serious criticism that the scheme has encountered is that of Professor Quénieux, who, although himself an ardent advocate of the principle of the reform, objects to the detailed programme on the ground that it makes its appeal, in the earliest stages, to mental curiosity and the spirit of observation; whereas, in his opinion, the imagination of the child should be chiefly exercised up to the age of 13 years. In this respect the new system seems to violate sound psychological principles. The fear is also expressed that the change is too extreme, and that a gradual transition from the old to the new would, in the end, prove more satisfactory. The very completeness of the change marks it, however, as a departure from the usual administrative course.

PUBLIC SECONDARY SCHOOLS FOR GIRLS.

The establishment and progress of public secondary schools (lycées and communal colleges) for girls are among the most important achievements of the Republic. The law of December 21, 1880, authorizing this provision encountered intense opposition, as was inevitable, since it violated customs and social prejudices of long standing. At the same time, the provision met a demand that had already secured the recognition of many of the leading men of the nation. Among these were M. Duruy, minister of public instruction from 1863 to 1869, and M. Gréard, the eminent director of the Academy of Paris, which position he held from 1879 to 1904.

By an official order of 1867, Minister Duruy had authorized courses of secondary instruction for girls to be given by university professors in accordance with prescribed regulations. At Paris and at several provincial cities, this order had been carried into effect, and appropriations had been made for the maintenance of the work from municipal and government funds. In 1880 the amount of the government appropriation for this service was 100,000 francs (\$20,000), and in 1881, under the impulse of the Camille Sée law, 300,000 francs (\$60,000). This provisional measure had much to do with overcoming unreasonable prejudices respecting the attendance of girls upon public institutions, but it was a very inadequate expression of the purposes even of its originator, who was an earnest advocate of a complete, well-organized, and uniform system of education for girls as an essential part of a general system of public education.

The new institutions were established by the joint action of the State, the departments, and the communes, or municipalities, in which they should be located. Provision was made for both day and boarding pupils, and as a means of encouraging patronage it was expressly provided in the law that the State and the local authorities should found scholarships for the benefit of boarders and partial boarders. The original professors of this new class of secondary schools were all university graduates, and in 1881 a special normal school was established at Sèvres to qualify women for service in the new institutions. In order to prepare students of the lycées for admission to the same, a sixth year was added, in a few lycées, to the regular course of five years.

PROGRESS.

The passage of the law of 1880 was followed immediately by the organization of a lycée for girls at Montpellier and of a local college at Auxerre. In 1886 the number of lycées reported was 14, with 2,243 students, and the number of local colleges 17, with 2,734 students, or a total enrollment of 4,977. In 1896 the enrollment in lycées for girls was 7,563, and in colleges 3,082, or a total enrollment of 10,645. This was an increase of nearly 114 per cent in ten years. The decade 1896 to 1906 showed still greater increase, the enrollment in lycées reaching 15,967 at the latter date, and in colleges 9,739, or a total of 25,706, an increase of 140 per cent in ten years. The latest official statistics pertaining to these institutions bear date November 5, 1908, at which time the enrollment in the 47 lycées for girls was 17,352, and in the 61 colleges (including 2 in Algiers) 10,624, a total of 27,976 students.

TABLE 8.—*Distribution of students in the public secondary establishments for girls, 1908.*

Location.	Number of students, November, 1908.			
	Total.	Lycées.	Colleges.	Special classes.
Continental France:				
Paris.....	5,948	3,684	945	1,319
Provincial departments.....	27,182	13,668	8,981	4,533
Algiers.....	1,541	.....	698	843
Total.....	34,671	17,352	10,624	6,695

GOVERNMENT APPROPRIATIONS.

In 1908 the government appropriation for this service, including the appropriation for the normal school at Sèvres, amounted to 3,214,075 francs, in round numbers \$640,000.

TUITION FEES AND SCHOLARSHIP FUNDS.

The tuition fees, which are turned into the public treasury, vary in the different classes of the schools and in the different localities. The maximum annual fee in the lycées is 250 francs (\$50); in the colleges the maximum is 150 francs (\$30). The living expenses depend upon location. According to recent statistics the maximum cost of living and tuition in lycées outside of Paris is 900 francs (\$180), which is reported for a lycée at Lille; at Versailles the cost is 825 francs (\$165). At Roanne it falls to 575 francs (\$115). By aid of the public scholarship funds provided for by the law of 1880, the advantages offered by these secondary schools are extended to girls of marked ability who could not otherwise meet the expenses. The scholarships are provisional or definite, and cover the expense for tuition and board or for board only. The number awarded in 1906-7 was 1,158.

RELATION OF THE SCHOOLS TO THE HIGHER EDUCATION OF WOMEN.

With respect to this very important division of the educational work created and sustained by the present Republic, the question naturally arises what relation it bears, if any, to the movement for the higher education of women, considering the expression in its broadest sense. This question is answered, in part, by the course of study, the scope of which may be inferred from the following timetable at present in force for the upper section:

Weekly time-table for the two years of the upper section.

OBLIGATORY CLASSES.

Subjects.	Hours a week.	
	Fourth year (age, 15 years).	Fifth year (age, 16 years).
*Ethics (morale).....	1	a 2
French language and literature.....	3	2
Ancient literature (by translations).....	1	
Living languages.....	3	b 4
History.....	2	2
Geography.....	1	1
Cosmography.....	c 1	
Physics and chemistry.....	1½	2
Animal and vegetable anatomy and physiology.....	1	1
Hygiene.....		
Notions of common law.....		c ½
Total.....	14	14½

^a In this class, ethics takes the form of psychology in its relation to moral doctrines and education.

^b Includes one hour for literature.

^c Or, if preferred, one hour a week for one semester.

OPTIONAL CLASSES FOR FOURTH AND FIFTH YEARS.

Subjects:	Hours a week.
Mathematics	2
Living Language (additional).....	2
Needlework	2
Drawing	2
Music	1
Gymnastics	1½
Total.....	10½

On the literary side the study of native literature and of the literature of England and Germany is particularly emphasized. The instruction is given by university professors, and is informing and cultivating. The students acquire also excellent command of the foreign languages for both speaking and writing.

The subjects of the course of study that more particularly illustrate its adaptation to the duties and responsibilities of women are as follows: Notions of common law, hygiene, and ethics (la morale). The course in common law includes: The relations of a minor to her father; the legal status of a married woman; the control of property; the laws governing inheritance, wills, and bequests; the nature of contracts; banking forms and processes; judicial procedures, and the main features of state and local administration. The course in hygiene includes such practical matters as the care of infants, the care of the aged, the means of guarding against infection, and the special study of tuberculosis.

It was intended by the author of the law of 1880, and his associates in the effort, that the education thus provided should be equivalent to, though not identical with, that offered in the secondary schools for boys. The development of mind and the formation of character were its aims; preparation for subsequent professional training was not regarded at all, excepting in the optional sixth year, already referred to. But new demands have been raised by the increase in the number of young women who intend to enter the university faculties and who, under present conditions, are obliged to prepare for the baccalaureate, or admission examination, by private tuition. As a means of correcting this discrimination against those least able to protect their own interests, it has been determined to open in a few lycées for girls a special course assimilated to that of the lycées for boys, and, like the latter, preparing for the bachelor's diploma. This special course would include Latin as an obligatory study. The first part of the baccalaureate examination would be passed at the end of the fifth year and the second part at the close of the extra sixth year. This provisional experiment is similar in purpose to the recent regulation reorganizing the secondary schools for girls in Prussia. Both measures are of special interest, not only as illustrating social movements of deep import, but for their bearing upon the tendency in certain centers of our own country to introduce distinctions between the education of young men and young women where none now exist.

DEPARTMENT OF HIGHER EDUCATION.

To the department of higher education, ministry of public instruction, belong the state universities and special schools, and the scientific bureaus of the Government. For the current expenses of this department, exclusive of administration, the Government appropriated in 1908 the sum of 21,584,576 francs, equivalent to \$4,316,915. Of this amount 16,941,246 francs (\$3,388,249) went to the state universities and special schools. The Government receives from the universities the receipts from examination and diploma fees, which amounted in 1907 to 5,164,775 francs (\$1,032,955). The remaining expenditure for these institutions was borne by municipal appropriations, bequests, income from invested funds, and students' fees. Recent estimates show that the Government still bears the larger part of the university expenses.

THE STATE UNIVERSITIES.

From Table 9 it will be seen that the University of Paris registered in 1908 only 40 per cent of the total number of students; in 1888 its registration was greater than that of the combined provincial universities. Two-fifths of the university students were enrolled in the

faculties of law (Table 10). The total number of students in January, 1909, i. e., 41,897, included 4,732 foreigners. The women students numbered 3,609, of whom 1,643 were foreigners.

The right to confer degrees is reserved exclusively to the state faculties by law of March 18, 1880. In addition to the state degrees of bachelor, licentiate, and doctor, a university doctorate has been created which attests the completion of specified studies, but does not admit the recipient to professional careers.

TABLE 9.—*Distribution of students in state universities.*

Universities.	Number of students.	
	January 15, 1907. ^a	January 15, 1908. ^b
Paris.....	15,789	16,935
Aix-Marseille.....	1,269	1,323
Besançon.....	325	296
Bordeaux.....	2,496	2,601
Caen.....	814	702
Clermont.....	281	314
Dijon.....	966	1,013
Grenoble.....	896	1,025
Lille.....	1,560	1,621
Lyon.....	2,783	2,816
Montpellier.....	1,752	1,842
Nancy.....	1,841	1,884
Poitiers.....	962	940
Rennes.....	1,498	1,419
Toulouse.....	2,675	2,617
Schools of medicine not included in the universities.....	2,290	2,542
Alger.....		
Total.....	38,197	39,890

^a Report of the budget.—Service of public instruction, 1908, by Maurice Faure, p. 27.

^b The same, 1909, by Maurice-Faure, pp. 75-78.

TABLE 10.—*Distribution of state university students by faculties for specified years.*

Faculties.	Students.		
	1907. ^a	1908. ^b	1909. ^c
Law.....	15,551	16,315	17,046
Médecine.....	6,599	7,220	7,333
Sciences.....	6,349	6,258	6,408
Letters.....	5,710	6,201	6,216
Pharmacy.....	1,735	1,574	1,510
Extra university schools of medicine and pharmacy.....	2,253	2,322	3,384
Total.....	38,197	39,890	41,897

^a Report on the budget.—Service of public instruction, 1908, by M. Maurice-Faure, p. 25.

^b The same, 1909, by M. Maurice-Faure, p. 79.

^c Bulletin Administratif, 1909, No. 1868, p. 503.

SPECIAL SCHOOLS OF UNIVERSITY RANK.

The following special schools of university rank are under the minister of public instruction: Collège de France (appropriation, statistics for 1908, \$112,500); Museum of Natural History (appropri-

ation, \$205,370); Practical School of High Studies (École Pratique des Hautes Études) (state appropriation, \$68,632; city, \$7,200); School of Archives (École Nationale des Chartes) (appropriation, \$14,800); School of Oriental Languages (appropriation, \$33,060); French School of Archæology at Rome (appropriation, \$14,500); French School at Athens (appropriation, \$23,540); École Nationale des Beaux-Arts (appropriation, \$84,052).

The Superior Normal School, which has been consolidated with the University of Paris, received a separate appropriation in 1908, amounting to \$139,528.

The combined subventions to the independent college of social sciences and the closely related school of high social studies (École Libre des Hautes Études Sociales) amounted in 1907 to \$2,400.

PRIVATE FACULTIES.

Besides the state universities there are independent university faculties under clerical auspices at Paris, Angers, Lille, Lyon, Marseille, and Toulouse.

SCIENTIFIC ESTABLISHMENTS.

The Musée Pédagogique, which since its organization in 1904 has become a unifying and inspiring center for the entire system of public instruction, has recently extended its equipment by the establishment of a laboratory of school hygiene. The Musée has charge of the system of international interchange of students carried on by agreement between the French Government and the Governments of Prussia, Saxony, Austria, England, and Scotland. During the year 1908 the number of French students placed in English and German schools was 84, and the number of foreign students placed in French schools 217. The appropriation for the various services carried on by the Musée amounted to 52,250 francs (\$10,590).

The appropriation for the Institut National de France, which is under the general direction of the ministry of public instruction, was 688,400 francs (\$137,680).

The technical schools, which complete the educational resources for which Paris is justly renowned, include the following, pertaining to the ministry of commerce and industry:

The Conservatoire National des Arts et Métiers, with 22 courses on the applied sciences and social economy, conducted by professors of high distinction. For the accommodation of its clientèle the instruction, imparted chiefly by lectures, is given from 8 to 10.30 in the evening. The institution receives an annual appropriation, which amounted in 1905 to 1,368,963 francs (\$273,792). The École Centrale des Arts et Manufactures, having a three-year course and ad-

mitting 250 students annually on the results of a rigid competitive examination. The state appropriation for this school in 1906 amounted to 731,308 francs (\$146,261). The *École des Hautes Études Commerciales*, in which scholarship funds are maintained both by the State and the city.

The *Institut National Agronomique*, the *École Polytechnique*, the *École Supérieure de Guerre*, etc., are under the charge of other ministries, according to their professional relations to the government service.

CURRENT MOVEMENTS PERTAINING TO THE STATE UNIVERSITIES.

The following survey of the status and current movements in the French universities is abridged from the report of M. Steeg, accompanying the financial estimates for 1909 submitted to the Chamber of Deputies.^a

THE UNIVERSITY OF PARIS AND THE PROVINCIAL UNIVERSITIES.

The plan followed by the eminent men who have taken leading parts in reviving superior education in the last thirty years might be divided into two parts: First, to develop the University of Paris and render it one of the most prosperous in the world; and second, to arouse the provincial authorities.

The University of Paris.—The first part of the programme seems likely to be speedily realized. The University of Paris is richly endowed; it receives from the State nearly 4,000,000 francs (\$800,000) for its personnel and nearly 650,000 francs (\$130,000) for its equipment, while its income from other sources exceeds 2,000,000 francs (\$400,000). It has, therefore, nearly 7,000,000 francs (\$1,400,000) a year at its disposal (which is 2,000,000 francs (\$400,000) more than the income of the University of Berlin). Its library consists of about 580,000 volumes.

In addition to the works published by its members, 951 theses for the various doctors' degrees were published under its auspices in 1905-6 (300 in law, 500 in medicine, 30 in science, 30 in letters, 11 for the diploma of superior studies in the faculty of sciences, and 80 for the corresponding degree in letters). The scientific output is therefore considerable; for the particulars referred to presuppose actual scientific research. There were 16,935 students attending the university in January, 1908, so that from this point of view the University of Paris is beyond question the first in the world, its attendance exceeding that of the next largest, Berlin (in 1906, 14,008), by nearly three thousand.

^a Rapport fait au nom de la commission du budget, exercice 1909, ministère de l'instruction publique et des beaux-arts, 1^{re} section, instruction publique, par M. Steeg, député.

The provincial universities.—These universities share, in a lesser degree, the development noted in the case of the University of Paris. Thus, they were attended by 18,063 students in January, 1908; their income proper amounted to 2,500,000 francs (\$500,000), besides 2,300,000 francs (\$460,000) from loans and other transactions (in 1907). During the scholastic year 1906-7, 250 degrees were granted in the doctorate of laws, 450 in medicine, with 20 diplomas in the faculty of sciences for higher research, and 80 in letters. The professors of these universities publish annually more than 100 volumes and 500 memoirs of important articles, besides thousands of notes upon judicial matters, scientific observations, bibliographies, etc. There is no doubt that great progress has been made by them in intellectual matters in recent years, as is shown, for example, by comparing the space which French science occupies in German bibliographies of 1908 with that given it fifteen years ago. To this scientific output the provincial universities have contributed their part. Nevertheless, these universities need new conveniences, new buildings, increased library facilities, and funds for books and periodicals. A comparison between the amounts appropriated for libraries at the French and German universities, and between the numbers of works in their respective libraries, shows the superiority of Germany in both respects. The University of Paris, with its 580,000 volumes and some 45,000 francs (\$9,000) appropriation, exceeds the library of any one of the German universities, except Berlin, in the number of books. The libraries of the 14 provincial French universities, however, are much smaller than those of the German universities.

It is complained that certain advantages are offered by the University of Paris which tend to draw students away from the provincial universities; these are in particular certain scholarships and privileges in attending the école normale, which exempt from a portion of the military service, besides reducing expenses. It is proposed, by way of offsetting these attractions, to increase the number of scholarships in the provincial universities.

Distinctions between universities.—There are marked differences among the 14 provincial universities themselves in respect to wealth, attendance, and number of faculties, and, in general, there is a distinction between such as are recognized as possessing a pronounced scholastic vitality and those which are inclined to be stationary. At some of the smaller institutions the professors acknowledge their inability to give their students the preparation required by recent reforms for licenses in philosophy or history. They are unable to offer either the number of lectures or the variety of instruction demanded. This condition might be remedied by a readjustment of the faculties and by a redistribution of the subvention granted by the state to the individual universities. Thus the principal business

of the faculties of letters, history, and philosophy is to prepare teachers. They are virtually normal schools, and it is unnecessary that there should be 15 normal schools in France. Physicians, on the other hand, are more numerous than teachers, and yet the right to practice medicine is granted by only 7 faculties, while 15 grant the license to teach. This could be remedied by reserving this license for the more important faculties of letters and sciences, while the others should retain their scientific mission with equipments and become normal schools for the service of higher primary instruction. The universities, deprived of the power to grant licenses to teach in lycées and colleges, would be abandoned by a part of their students, who would repair to the larger institutions. These would take the name of universities of full exercise. It has further been suggested to specialize the universities so that one should be a center of history, another of chemistry, etc. Students devoted to special subjects would then repair to the proper university, and their libraries would become less encyclopedic and more special. But this tendency is apt to run into excess, and its advocates are prone to forget that when a university becomes specialized it ceases to be a university.

Méans of stimulating the scientific activity of the universities.—The effectiveness of courses of instruction may be increased by concurrence among professors of the different faculties of the same university. For example, at Montpellier professors from the faculties of medicine, law, and sciences have given most interesting lectures to students in the faculty of philosophy upon the physiology of the brain, mental alienation, the logic of scientific methods, and the influence of logic upon the development of law. Conversely, a professor of philosophy has given a course in psychology at the clinic of mental maladies. At Bordeaux professors from the faculties of science have lectured upon the infinitesimal calculus to students of the philosophical faculty in their study of Leibnitz, and other instances are cited, as where masters of medicine have instructed future teachers of letters or sciences in the rules of school hygiene and mental hygiene. In this way the relations among the professors of different faculties will be increased, and they will become conscious of a collective life and be interested in it. This interest will be augmented by allowing the professors greater liberty in discussing university affairs and suggesting changes. The programme of the examination of the “agrégation des lycées,” elaborated by the ministry, is uniform for the whole country, and imposes a kind of uniformity of instruction upon university professors which tends to reduce them, as it were, to servitude to the programme. Individuality in instruction, in choice of text-books, etc., and the autonomy of the professor are destroyed by this tyranny of the programme, which consequently should be suppressed.

UNIVERSITIES IN THEIR GEOGRAPHICAL RELATIONS.

It has been charged that the universities are so absorbed in pure science and abstract learning that they take little interest in the material wants of the regions in which they are situated, and even if they do interest their city or department in their work they hardly ever arouse the interest of their province. Thus, there are municipal or departmental universities like the University of Rennes or of the mouths of the Rhone, but not a university of Brittany or Provence. This charge, however, is exaggerated, for the universities, far from being detached from the needs of their respective regions, do really take an important part in their material existence. In the provincial faculties of science there are laboratories adapted to the agricultural or industrial or commercial needs of those parts of the country where the universities are situated; e. g., there is a school of watchmaking at Besançon, an electro-technical institute at Nancy and Grenoble, a brewing school at Nancy, an œnological school at Bordeaux, etc. These various laboratories are patronized by the inhabitants of the respective provinces, who apply to them for analyses and scientific examinations. The law faculties also give practical courses, which are conducted by magistrates, lawyers, and ministerial officers of the vicinity conjointly with the university professors to provide instruction in the management of business affairs. Finally, the faculties of letters tend more and more to become normal schools, since they have added pedagogics to their courses, and they are attended by large numbers of prospective teachers. Two of these faculties have contributed to the formation of infantry officers by supplying lecturers to military schools in their neighborhood. This practical direction of university instruction has given rise to the saying that superior instruction now has a threefold function, namely, to create, to impart, and to apply knowledge. On the other hand, the interest manifested by universities in the practical affairs of their provinces is reciprocated by the latter, as at Caen, where it is not merely the department of the Calvados, but the whole lower Seine region, which maintains the body of students; and at Besançon subventions are granted the university not only by the city or the departments of Doubs, but by the whole of the region of the Haute-Saône, and so on. Private individuals of wealth are now, especially in industrial districts, seconding the public bodies by giving funds to the universities for special purposes, such as laboratories. Suggestions are made to increase the influence of the universities by admitting to the university council (which is composed exclusively of professors) representatives of the societies or other bodies which grant subsidies to the universities, on certain specified occasions, and allowing them a voice in the discussions. The local interest in the institutions

would thus be increased effectively. And, in addition to this measure, it is further suggested that the professors should publish a journal or bulletin containing a brief account of their work and publications. This might contain matter of special interest to the region or district, such as historical notes on the province and on its literature, its agriculture, chemistry, etc. In this way the general public interest in their university life would be awakened all through the provinces.

FOREIGN ACTIVITY OF FRENCH UNIVERSITIES.

An Italian-French institute was created at Florence by the University of Grenoble, which has become a center of Italian studies. Students from Grenoble make a prolonged sojourn in Italy, where, while continuing their own studies, they may be of service to the young Italians who wish to study the French language and literature. The Universities of Bordeaux and Toulouse have directed their efforts toward Spain. Prof. Pierre Paris, of the faculty of letters of the University of Bordeaux, has made several archaeological trips in Spain since 1896. In 1897 a society of correspondence was established for the purpose of carrying on Spanish research. In 1898 a bulletin was published and a mission organized by the university to improve relations with the Spanish universities, which met with a cordial reception at Madrid, Salamanca, and Valladolid, and there is now to be an interchange of professors between the Spanish universities and the universities of Bordeaux and Toulouse. For its part, the University of Toulouse is organizing a union of French students in Spain. Special courses will be provided for such students in Madrid and Burgos by Spanish professors, to whom the University of Toulouse has applied for that purpose.

RECENT MEASURES PERTAINING TO THE MEDICAL FACULTIES.

The unsatisfactory condition of medical instruction in France, in particular the absence of provision for training specialists and of adequate laboratory facilities, have long been subjects of complaint and criticism by professors and physicians. The urgent demand for reform in these respects led to the appointment in 1907 of a government commission to investigate the conditions and advise measures for correcting the evils complained of. Preliminary to the full report of the commission, the report of a subcommission charged to study in detail the various propositions submitted for consideration and to suggest measures of reform was presented. This report dealt with the general education of medical students as a basis of their professional training and with the improvement of the conditions and courses of medical instruction.

Under the first consideration, the report emphasizes the need on the part of intending medical students of more thorough training in literary and philosophical studies. These, it declares, "are the most efficacious instruments of intellectual and moral discipline, imparting the habit of independent and exact reflection, maintaining the disinterested pursuit of the things of the mind, opposing idealism to the utilitarian current of the time, and furnishing the individual for all time with general ideas." The arrangement of the secondary programmes of 1902, which allows students seeking admission to medical schools and faculties to omit examination in classical studies, is condemned. The report further confirms the opinion repeatedly expressed by leading professors, that the special year of studies leading to the certificate of physics, chemistry, and natural science should be strictly conformed to the requirements of the medical faculties, in accordance with the purposes for which this certificate was created (decree of July 31, 1893).

In regard to the state of the medical faculties themselves, the report points out in particular the omission from the course of study of the rules of medical ethics, or etiquette (medical deontology), and the absence of instruction in bacteriology from the obligatory medical course. The latter omission is particularly regretted in the country which has given to medical science the results of the investigations of Davaine and Pasteur.

The report also notes the omission from the official programmes of stomatology, of the dental art, and of otorhinolaryngology. These omissions seem the more inexcusable because France possesses eminent specialists who might easily organize courses of instruction in these branches which would rival those of other countries and attract foreign students by their distinction.

Provision for instruction in these various specialties exists in France under private auspices. The complaint here is of omissions in the public system regulated by the Government.^a

The outcome of the work of the medical commission is a decree signed by President Fallières, and issued by the minister of public instruction January 11 of the current year, providing for the reorganization of medical studies in the state faculties and schools of medicine. The decree was accompanied by the substance of the report of the full commission, setting forth in general terms the reasons for and the purposes of the reforms proposed.

While deprecating the tendency to sweeping criticism of medical science and practice in France, in view of the efficiency and distinction of French physicians and the excellence of the French medical

^a Report drawn up by Doctor Teissier, agrégé of the Paris faculty of medicine. See report on the budget for 1909, ministry of public instruction and fine arts, sec. 1, presented to the Chamber of Deputies by M. Steeg, pp. 51-54.

schools as compared with those of other countries, the report recognizes certain deficiencies in the existing course of medical study and in the equipment of the medical faculties. It is admitted that the preparation of the future practitioners is not sufficiently practical and that the provision for their technical training has not kept pace with the development of medical science. The want of accord between the courses of study and the examinations is pointed out, the latter favoring "a work almost exclusively bookish and memorized." Clinical exercises and hospital practice are too much neglected. These are, in brief, the matters to which the provisions of the recent decree are directed.

The decree requires that all candidates for admission to the medical faculties shall have completed the course of secondary studies and shall have obtained the bachelor's degree. This requirement is maintained in the case of all foreign students who wish to practice medicine in France.

In addition to the preparatory year of study in the faculty of sciences leading to the special certificate in physics, chemistry, and natural sciences (the P. C. N.), the student of medicine must complete the full five-year course. Four years of the course must be passed at the seat of the faculty in which the student is inscribed; the fifth year may be passed, with the authorization of the faculty, in a medical school chosen by the student, either in France or in a foreign country.

The course of study for each year is nine months in duration.

Every student is required to assist at the appointed clinics and to make up the full hospital term. A record of each student's attendances (*livret scolaire*) will be kept, and this record must be forwarded to the examining boards for consideration in determining the standing of the student in the examinations appointed at the several stages of the course, and in the final examination for the diploma.

The course of study is extended to include the subjects whose previous omission has been noted.

The examinations, according to the report of the commission, were the weakest part of the former organization. One of the principal points of criticism is the frequency of the examinations. They occurred at intervals throughout each year, and at times when no account could be taken of the laboratory and other practical works in which the student was expected to bear a part; moreover, the arrangement encouraged the habit of hasty preparation by a process of cramming.

Under the new provisions close relation is maintained between the courses of study and the examinations by which they are necessarily controlled. The examination at the end of the year is reestablished; this becomes, then, the occasion for a methodical review and a sifting

of the studies pursued. Laboratory and other practical exercises are made obligatory parts of the examinations.

For the multiple examinations allowed each year under the old system two annual periods of examination are now appointed; one in July, the other in October. With the exception of the clinical examinations, no individual or collective examinations are allowed at other times.

These provisions are intended to insure regular attendance and serious application on the part of the student, and to relieve the professors who are appointed on the examination boards from the constant interruption of their professional duties.

The course of medical instruction prescribed by the decree comprises, (1) under the head of theoretic instruction, the biologic sciences; (2) subjects pertaining strictly to medicine and medical practice; and (3) pathology, general and special. The theoretic instruction is completed by laboratory exercises, practical demonstrations, and clinics.^a

The report of the commission on medical studies naturally makes no allusion to administrative questions, as these were not included in the instructions to that body. The situation of the medical faculties in this respect, however, is a subject of earnest discussion outside administrative circles. The peculiarities of the system and its effect upon the development of medical instruction were set forth in an address to the minister of public instruction—unanimously adopted by the council of the Paris faculty of medicine during the current year—proposing for this faculty a special régime that shall free it from external interference.

THE PARIS FACULTY ON ADMINISTRATIVE REFORM.

The council of the Paris faculty of medicine considers it a duty to make known the actual situation of that body.

It is the conviction of the council that this situation tends to produce and to aggravate the ever-increasing agitations which have so greatly disturbed the entire medical fraternity.

In order that the condition should be understood, it is necessary to recall briefly the changes which have taken place in higher education during the last twenty years, and which have modified, more or less, the activities of the faculties of medicine and lessened their vital force.

In 1888 the corps of general inspectors of higher education was suppressed by a vote of the Chamber of Deputies. But by a decree of April 20, 1888, the minister of public instruction was authorized to commit the inspection of the state faculties, from time to time, to members of the consultative committee of public instruction, section of higher education.

It appears that for a number of years the minister has not provided for this service of temporary inspection. He has therefore depended for information as to the needs and desires of the faculties of medicine, solely upon the rectors.

^a For the full text of the decree of January 11, see *Bulletin Administratif*, 1909, No. 1860 (Jan. 16), pp. 37-53.

In 1896 the universities (formerly isolated faculties) were constituted; the decree of July 21, 1897, instituted the councils of the universities.

Attention is called to the following articles of this decree:

"ART. 5. Under the authority of the minister of public instruction the rector presents (to the council) matters relative to the university and confirms the decisions of the council.

"ART. 6. Under the authority of the rector the deans or directors attend to the execution of the decisions of the council in respect to matters pertaining to the faculties and schools of the university.

"The council decides:

"(a) Upon the regulation of independent courses of instruction.

"(b) Upon the organization and regulation of courses, lectures, and practical exercises common to several faculties.

"(c) Upon the general organization of courses, lectures, and practical exercises arranged annually by the faculties and schools of the university.

"The general table of courses of instruction, lectures, and practical exercises is issued annually by the council in the month of July. It comprises the subjects necessary for obtaining the degrees conferred by the State.

"ART. 12. Every member of the council has the right to express his opinions upon questions pertaining to higher education."

The council of the faculties of medicine has only the right to express opinions or wishes. These opinions are transmitted by the dean of the faculty to the rector of the university, who transmits them to the university council; the latter in turn transmits them to the ministry. Here they are given over either to the consultative committee of public instruction, or to the permanent section of the superior council of public instruction, to be finally brought before the superior council itself.

The constitution of these intermediaries—council of the university, consultative committee, permanent section, superior council of public instruction—presents the following features:

The council of the university comprises:

1. The rector of the academy (or university), president of the council.
2. The deans of the faculties and the director of the higher school of pharmacy.
3. Two delegates from each faculty or school, elected for three years by the entire faculty or school from the body of full professors.

In accordance with this decree the council of the University of Paris comprises 18 members, of whom 3 only are medical men, the great majority, 15, are not.

The consultative committee, section of medicine, with the rector and the director of higher education, comprises only 2 medical men, but all are appointed by the minister.

The permanent section comprises 15 members, 13 not belonging to the medical profession, 2 graduates in medicine. One of the physicians is elected by the faculties, the other is appointed by the minister.

The superior council of public instruction comprises 53 members; of these 50 are nonmedical men, 3 belong to the profession.

Of the 3 physicians, 2 are elected by the faculties, the other is appointed by the minister.

The numbers above given show what a small proportion of members, competent from the medical standpoint, are included in the different bodies in which the wishes and opinions of the faculties of medicine are considered.

Under these conditions, you will see, Mr. Minister, that the fate of the wishes of the faculties depends actually upon two competent men. As a consequence,

the faculties of medicine have virtually no voice in the administration of their affairs.

The assimilation of the faculties of medicine to the other faculties is a mistake.

The council of the faculty of medicine of Paris urges, therefore, the creation of a permanent committee, essentially medical, composed in equal numbers of members appointed by the minister and of members elected by all the faculties and schools of medicine.

This committee should be charged to address directly to the minister, after examination, all the considerations of interest to medical education, and to inform him as to the needs and desires of the faculties and schools of medicine.^a

The system of administration is the same for all faculties, hence the above address sets forth a cause of complaint common to all.

^a Cited from *L'Enseignement Secondaire*, January 15, 1909, pp. 32-33.

CHAPTER X.

EDUCATION IN CENTRAL EUROPE.

Contents: Introduction.—School expenditures in Germany.—Elementary schools in Austria.—School legislation in Germany.—Teachers' salaries in Prussia.—New regulations concerning Prussian elementary schools.—The school of the future.—Results of school education in Prussia.—Gymnastics in German schools.—Coeducation in Prussia.—Children's memory and their capacity to learn.—Examination of women school principals.—Education of weak-minded children.—Crippled children.—Care of dependent children.—Feeding school children in Bavaria.—The work of school physicians.—Care of children's teeth.—Annuitants in Germany.—Illiteracy in Europe.—Illiteracy and inventiveness.—The situation in Hungary.—Elementary schools in Budapest.—Conference of continuation school teachers.—Three systems of continuation schools.—Rural high schools.—Graduates of secondary schools.—Cost of secondary schools.—New agencies of higher education in Germany.—Resolutions of German university professors.—Participation of German States in university attendance.—Chairs of pedagogy.—University libraries.

INTRODUCTION.

The Annual Report of the Commissioner of Education for 1908 contains, in Chapter VIII, entitled "Education in Central Europe," the results of the latest quinquennial census of the lower schools in Prussia, giving, besides the statistics of 1906, those of 1901 and 1896 to afford opportunities for comparison. In the present chapter the school expenditures of the Empire of Germany are shown in comparison with other expenditures of the 26 States (see pp. 446-448).

The number of public elementary schools in Germany was 61,198, attended by 9,779,356 pupils, or 94 per cent of all children of school age (6 to 14), leaving 6 per cent in all other schools, private and secondary, including home training. Since 1901 the daily attendance shows an increase of 9.1 per cent. During the same period the number of men teachers increased 10.6 per cent, that of women teachers 30.5 per cent. The annual average cost per pupil in public elementary schools increased from \$11.20 in 1901 to \$12.86 in 1906. The average number of pupils to each teacher was 58 in 1906, some having as high as 85 pupils in rural ungraded schools, others as low as 33.

While in legislative bodies in central Europe efforts are made to place public education upon a legal basis where hitherto it had rested merely upon ministerial regulations (see pp. 449-452), and local authorities and enlightened leaders try to modernize the schools by changing them from institutions for the acquisition of knowledge to places in which knowledge is applied and work is taught (see pp. 455-461), experimental psychology, as a practical science, comes to the aid of teachers by showing them how to change the method of teaching so as to save the time and strength of both pupils and teachers (see pp. 469-471).

**SCHOOL EXPENDITURE OF THE DIFFERENT GERMAN STATES
COMPARED WITH THEIR ENTIRE EXPENDITURE.**

In the following tables the sums which are stated to be expended for schools represent only the State's quota for schools; neither imperial (or federal) nor local expenditures are included.

It is difficult to place side by side, for the purpose of comparison, the expenditures for public education in the 26 German States, and those for various other purposes for which the different legislatures make annual appropriations. The difficulty arises partly from the fact that the governmental departments are not delimited alike in their activities; partly from the fact that the departments in German state governments are credited with large incomes from the administration of railroads, forests, mines, public lands, navigation and harbors, postal affairs, telegraphs and telephones, insurance and old-age pensions, and numerous other state activities, the balance sheets of which have a credit as well as a debit side. Also the payment of interest on state debts, payments made to the imperial treasury for the support of the Empire and its army and navy, and other things have to be considered. All such expenditures should be deducted to find a true basis of comparison of the outlay for schools with that for other purely state purposes, such as interior administration, church, science, justice, and finance, as well as the outlay for exterior affairs, i. e., the State's relations to the Empire, to its sister States, and to other countries. (We need to bear in mind that some German States maintain their own embassies, or legations, in Berlin, Vienna, Rome, and other capitals.)

Such a careful analysis has been attempted by the Imperial Statistical Bureau in Berlin (see "Vierteljahrsheft zur Statistik des deutschen Reichs," 1908), with the following results:

Summary of expenditures of the different States of Germany in 1907.

Budget for 1907—Departments.	Current expenditures.	Extraordinary expenditures.
Exterior affairs.....	\$11,890,980	\$25,228
Interior administration.....	134,283,170	12,380,141
Church, science, and schools.....	89,961,715	1,384,565
Justice.....	58,751,728	904,567
Finance.....	86,333,072	1,097,489
Total.....	381,220,665	15,791,990

According to the foregoing table, the current expenditures for church, science, and schools amount to 23.6 per cent of the sum total, while the extraordinary expenses for the same purposes amount to 8.6 per cent. In the publication quoted, the sums spent for elementary schools exclusively are stated for 1906 (the latest school census) for the separate States. (See table below.) The total is a little less than \$30,000,000, or about one-third of what is appropriated for

all three purposes—church, science, and schools. If the local (municipal) expenditures were added in, the sum for elementary schools would be \$125,000,000. This sum would not include continuation, vocational, and technical schools, for such institutions do not belong to the administration of the minister of worship, medical affairs, and public education, but to that of the minister of commerce and industry.

A minute comparison, of course, is impossible, for the per cent of the State's quota is not the same for the various departments; but the following table, which gives the sums expended for all purposes (column 3), then for churches and schools separately (columns 4 and 5), and lastly for the lower schools alone (column 6), enables us to see what vast sums are expended for the support of churches, and how these sums compare with those spent for education. Column 5 includes what is spent for the support of secondary and higher institutions of learning, also for institutions of scientific investigation, hygienic affairs, and art academies and collections; in fact, for all institutions tending to increase knowledge, offering a higher appreciation of life, and securing comfort and health, i. e., all institutions over which the minister of worship, medical affairs, and public education holds sway.

Current expenditures of the different German States in 1907.

States.	Population in 1905.	Current expenditure.			
		For all purposes.	For churches.	For all schools.	For elementary schools. ^a
Prussia.....	37,293,324	\$223,576,129	\$5,986,795	\$41,845,303	\$19,595,964
Bavaria.....	6,524,372	36,821,789	2,361,603	b 6,570,918	4,373,964
Saxony.....	4,508,601	22,959,122	825,995	5,433,588	2,473,058
Württemberg.....	2,302,179	14,932,239	c 4,097,813		1,269,254
Baden.....	2,010,728	14,187,965	257,159	3,136,650	1,064,336
Hesse.....	1,209,175	8,095,594	115,002	1,877,891	687,344
Mecklenburg-Schwerin.....	625,045	2,942,822	65,164	346,590	59,024
Saxe-Weimar.....	388,095	2,483,982	141,658	389,320	280,840
Mecklenburg-Strelitz.....	103,451	686,630	22,372	18,518	90,202
Oldenburg.....	438,856	2,247,672	25,847	414,477	270,606
Brunswick.....	485,958	2,870,137	112,598	511,819	283,696
Saxe-Meiningen.....	268,916	1,276,418	49,980	217,008	164,220
Saxe-Altenburg.....	206,508	942,694	45,220	190,709	78,540
Saxe-Coburg-Gotha.....	242,432	1,188,382	62,356	314,755	133,994
Anhalt.....	328,029	2,282,872	153,915	d 948,168	684,488
Schwarzburg-Sondershausen.....	85,152	477,952	30,535	86,037	41,650
Schwarzburg-Rudolstadt.....	96,835	472,168	25,157	70,690	44,506
Waldeck.....	59,127	233,240	6,902	48,980	26,180
Reuss, senior line.....	70,603	226,838	10,710	25,847	12,138
Reuss, junior line.....	144,584	440,348	19,659	130,662	97,580
Schaumburg-Lippe.....	44,992	171,646	119	38,294	16,184
Lippe.....	145,577	666,352	30,654	275,477	136,850
Lübeck e.....	105,857	1,753,517	21,230	492,065	201,348
Bremen e.....	263,440	5,083,666	(f)	922,965	479,332
Hamburg e.....	874,878	23,643,269	5,355	4,142,366	2,297,652
Alsace-Lorraine.....	1,814,564	10,546,232	921,155	1,807,729	725,900

^a According to school census of 1906.

^b This sum includes erection of buildings.

^c Expenditures for churches and schools are not stated separately in Württemberg.

^d The great outlay of the State of Anhalt is explained by the fact that the lower schools in Anhalt are supported by the State exclusively, there being no local taxation for schools.

^e The exceptionally high expenditures in the free cities is explained by the fact that they include local taxation, these free cities being cities and also States of the Empire.

^f Bremen does not support churches.

There are great differences in the proportionate outlay for churches and schools in the German States, as is seen from the foregoing table. Thus, for instance, Prussia, as a State, pays for the lower schools about one-half the sum spent for all kinds of educational institutions; Bavaria pays more than two-thirds for lower schools; Baden only one-third; Hesse not much more; Mecklenburg-Schwerin only one-sixth. The expenditures for churches amount to not quite one-third of the sum the state government spent for elementary schools in Prussia; in Bavaria the proportion is more than one-half; in Hesse one-sixth; in Mecklenburg-Schwerin it is higher than that for the lower schools. The State and city of Bremen pay nothing for churches; Hamburg a very small sum. In Alsace-Lorraine the amount paid for the support of churches is very high, because, according to local French laws still in force, clergymen and all clerical officers are paid by the State.

ELEMENTARY SCHOOLS IN AUSTRIA.

The Oesterreichische Schulbote (Vienna) published in October, 1908, a detailed statement of the state expenditures for elementary schools in Cisleithania (Austria proper—that is, without Hungary). The total state expenditures for the year 1906 for education of all kinds, elementary, secondary, higher, and special, so far as the institutions are subject to governmental supervision, amounted to 279,582,000 crowns, or \$56,755,146. This does not include many private schools, nor many special vocational schools established and maintained by private endowments or communal initiative. The population of Austria proper being, according to the census of 1905, 27,238,053, the per capita of population, therefore, was \$2.09. The total amount spent for elementary schools alone was 121,058,000 crowns, or \$24,574,774; hence a per capita of \$0.90. The various States, or crown lands, participated in this as follows:

	Crowns. ^a		Crowns.
Bohemia.....	51,726,000	Tirol.....	2,165,000
Moravia.....	18,364,000	Carinthia.....	1,675,000
Galicia.....	14,463,000	Carnolia.....	1,294,000
Vienna (city).....	14,140,000	Dalmatia.....	1,265,000
Lower Austria.....	10,612,000	Salzburg.....	1,113,000
Styria.....	6,152,000	Trieste.....	1,063,000
Silesia.....	3,739,000	Görz-Gradiska.....	671,000
Upper Austria.....	3,188,000	Istria.....	669,000
Bukowina.....	2,334,000	Vorarlberg.....	594,000

This list does not include Croatia, Slavonia, Bosnia, and Herzegovina. The first two belong to Hungary, the latter two are new accessions.

^aA crown is worth 20.3 cents.

^bThese sums do not include local taxation.

The state expenditures per capita of the population for elementary schools in these States is shown in the following list:

Bohemia	\$1. 45	Upper Austria	\$0. 66
Silesia	1. 33	Bukowina .....	. 55
Moravia	1. 31	Görz-Gradiska .....	. 52
Lower Austria, including Vienna	1. 22	Tirol .....	. 44
Salzburg	90	Carnolia .....	. 43
Trieste .....	. 85	Istria .....	. 33
Styria .....	. 78	Galicia .....	. 32
Carinthia .....	. 77	Dalmatia .....	. 28
Vorarlberg .....	. 73		

The following table gives the number of elementary teachers and the number of inhabitants to each teacher:

	Number of teachers.	Number of in- habitants per teacher.
Bohemia	23, 510	278
Galicia	11, 903	645
Lower Austria (including Vienna) ..	10, 695	295
Moravia	8, 951	286
Tirol	2, 759	342
Upper Austria	1, 997	414
Silesia	1, 559	362
Styria	3, 136	445
Bukowina	1, 324	678
Carinthia	1, 056	353
Carnolia	753	683
Dalmatia	710	863
Salzburg	654	310
Görz-Gradiska	489	493
Vorarlberg	442	309
Istria	434	831
Trieste	348	548

The total number of elementary teachers was 69,555. This does not include teachers of private schools nor those of elementary classes in secondary schools, nor does it include several States or crown lands mentioned at the foot of the first table. It is only the teachers under governmental supervision of the States or crown lands mentioned which are included in the total of 69,555; the number of teachers, with all the additions indicated, would be 91,808.

SCHOOL LEGISLATION IN CERTAIN GERMAN STATES.

The legislature of the State of Oldenburg (population 438,856 in 1905) has been discussing a bill concerning the state school system, during the winter session of 1908-9, which proposes to place the administration and superior supervision of educational institutions, except continuation and vocational schools, in the hands of the grand ducal ministers of education—that is, into the hands of the Protestant government bureau at the city of Oldenburg and the Catholic

school commission at Vechta. According to the bill, the use of new text or school books for religious education shall be permitted only if these two authorities sanction their introduction. The local administration of elementary schools is given over to the local boards, which consist of the mayor, the parish pastor, the school principal, and from two to four elected citizens serving for six years.

Direct professional supervision is provided for, but the religious instruction is supervised by the parish pastor or priest, and the maximum number of pupils allowed is 70 to a teacher. This does not prescribe that there shall be 70 pupils in each class room, but it means that if the number of children enrolled in any district exceeds 70, there shall be made provision for an additional school-room at once. The bill provides for better salaries for teachers—i. e., from \$300 to \$600 for principals, with a suitable dwelling and garden land, or indemnity for rent amounting to about 20 per cent of the salary, and a local addition of \$40 per year for a number of years. For class teachers the salary is fixed at from \$250 to \$540, plus 20 per cent rent indemnity and a certain number of annual increases of \$35 each.

All ancient, private, and semiprivate endowments are definitely handed over to the civil community, which takes upon itself the maintenance of the schools in connection with the state government, which latter derives its moral and legal right to supervision and direction through its quota to the school support. Local school supervision by religious bodies, through clergymen, is done away with, except so far as lessons in denominational religion in preparation for church confirmation are concerned. This division of the duties of school supervision and general management seems to be the final solution in German States of the vexing question whether school supervision shall be conducted by the clergy or by professional teachers.

The State of Wurttemberg (population 2,302,179) also is preparing a new school law. So far as religion is concerned, the legislature follows the principle for which all German States, including Prussia, have declared, namely, that of separate schools for Catholics and Protestants, as well as for Jews in cities where enough Jewish children are found to open a separate school. The subjects of the course of study for elementary schools (so-called *Volkschulen*) are determined by the bill. History, geography, nature study, and gymnastics for boys, branches which hitherto rested on ministerial decrees only, now receive statutory sanction as obligatory subjects; elementary geography, drawing, and handiwork for girls also become obligatory. As optional studies are named manual training for boys, accompanied by "working drawings," and gym-

nastics and domestic economy (housekeeping, including cooking) for girls.

From this it is apparent that the course is being enriched. The bill recognizes intermediate schools (*Mittelschulen*), the characteristic of which is instruction in a modern foreign language, and auxiliary schools (*Hilfsschulen*) for abnormal or weak-minded children. It is left to the authorities of the school districts to establish such schools or not, and it is left to the parents to decide whether they will make use of them for their children. Another paragraph of the bill is significant. It bestows upon the communities the right to extend the compulsory attendance act to the beginning of the sixteenth year of life. This is done to keep boys and girls under observation in vocational schools during the age of adolescence and apprenticeship.

Like Oldenburg, the State of Wurttemberg reduces the maximum number of pupils per teacher. It was formerly 90; it will be 70 if the bill becomes a law. Imperial statistics for 1906 show that in Prussia the average number of pupils per teacher was 60, in Bavaria 58, in Saxony 61, in Wurttemberg 57, in Baden 64, in Hesse 57.

The minister of public instruction of Wurttemberg submitted to the legislature also another school bill, which deals with the reform of the professional training of teachers. The normal-school course is prolonged to six years, and the instruction given is to be greatly improved and deepened. It is proposed to devote the sixth year to more language and literature, to a more extensive study of pedagogy through practice in the model school, and to the study of methods of child study and self-activity. The normal-school course will thereby receive an extension, such as can be found in Saxony, in the three free cities, and in the western provinces of Prussia.

The Kingdom of Saxony (population 4,508,601) also contemplates a revision of its school law, and a bill is being prepared by the government to be laid before the legislature early in 1909. Smaller states, like Saxe-Weimar (population 388,095) and others, have already revised their school laws, and everywhere in Germany, either by statute or by decree, changes are made which are intended to improve the education of the people, though these changes involve heavier burdens of expenditure for communities and the State.

In Switzerland (which is mentioned in this connection merely to indicate that the democratic form of government succeeds in solving school problems in a more radical way) the question of sectarian instruction in school has been settled by the constitution, namely: Each child, as it enters school, brings a statement signed by father or guardian, which determines whether or not the child is to receive religious instruction; if so, whether Catholic or Protestant. At stated hours during the week the parish pastor or priest comes to

the school and gives the lessons, while the teacher is freed from teaching religion. In all other branches the schools are common schools, pupils of all denominations sitting side by side. The Swiss seem to be very well satisfied with this solution; at any rate clergymen of all denominations meet on common ground, and difficulties arising from lack of harmony between teachers and clergymen have entirely ceased to agitate the communities.

TEACHERS' SALARIES IN PRUSSIA.

The final result of the deliberations in the lower house of the Prussian legislature, concerning the remuneration of teachers in the lower schools, though it does not come up to the expectations of the teachers, is after all quite a step forward. The minimum salary for men class teachers (that is, at the beginning of their careers) is to be 1,400 marks (about \$333), for women class teachers 1,200 marks (\$286). There are two annual increases of 200 marks, then two of 250 marks, and after that five of 200 marks, making a total increase of 1,900 marks (\$452), and a total salary of 3,300 marks (\$785.50) for men after nine years of service; the increases for women make a total salary of 2,450 marks (\$582).

To these sums must be added 700 marks (\$166.60) for rectors or principals of fully graded schools, 200 marks (\$47.60) for principals of schools of four to five grades, and 100 marks (\$23.80) for teachers of ungraded schools. There should be added, also, reimbursements for rent in cases where the schoolhouse contains no suitable dwelling accommodations for the teachers. This indemnity amounts to 800 marks (\$190.40) in cities of the first class, 650 marks (\$154.70) in cities of the second class, 540 marks (\$128.50) in cities of the third class, 450 marks (\$107.10) in cities of the fourth class, and 330 marks (\$78.50) in cities of the fifth class.

A man teacher may therefore get \$785.50, plus \$166.60, plus \$190.40, or a total of \$1,142.50 a year, during the last five, ten, or fifteen years of his service, and retire as principal on a pension of 75 per cent of his last year's salary, which is \$856.80. In Germany, where the purchasing power of money is far greater than here, these sums are considered not only a great improvement over salaries and pensions of former years, but quite an adequate income.

The teachers are gratified to hear that a paragraph in the new law specifically states that in computing a teacher's pension these rent indemnities shall be considered integral parts of the salaries, which in many cases was not done formerly. This, of course, increases the pensions considerably, and since the State alone pays the pensions, the increases are secure from local favor or disfavor.

Teachers all over Germany look hopefully toward Prussia, as a law of this kind will act as an example for other States of the Empire. That this is desirable may be seen from the following comparative table, which gives the salaries for elementary school teachers in the four largest States of Germany. The salaries mentioned do not include indemnity for rent, nor extra pay for principals; they include only the cash pay of class teachers.

Salaries paid elementary teachers (men) in certain States of Germany.

Year of life.	Salary.			
	Prussia.	Bavaria.	Saxony.	Wurttemberg.
Twenty-fifth.....	\$333. 20	\$321. 30	\$357. 00	\$302. 20
Fortieth.....	595. 00	499. 80	595. 00	445. 00
Forty-ninth.....	737. 80	618. 80	714. 00	540. 25
Fifty-first.....	<i>785. 50</i>	<i>618. 80</i>	<i>714. 00</i>	<i>540. 25</i>
Fifty-second.....	785. 50	<i>668. 40</i>	714. 00	<i>587. 85</i>

The sums in italics are the highest salaries obtainable by class teachers.

The House of Lords in Prussia has adopted the schedule of the lower house with slight amendments.

NEW MINISTERIAL REGULATIONS CONCERNING INSTRUCTION IN PRUSSIAN ELEMENTARY SCHOOLS.

The Prussian minister of public instruction, Doctor Holle, issued in 1908 new regulations concerning the manner in which elementary instruction is to be given. They are based on the course of study adopted in 1872, do not go into the minutiae, demand nothing new, but in a general way point out in what way time and labor may be saved, and they infuse, so to speak, a new spirit into matter and method of the schools. Since the regulations are addressed to the supervisory authorities, it stands to reason that they will urge the teachers to change their customary methods to conform their work to the minister's order.

The old maxim, "Through self-activity to self-dependence," is especially emphasized by the minister. He orders more attention to be paid to self-activity on the part of the pupils, independent action in form of reciting, measuring, computing, framing rules of their own, and choosing their own mode in writing down what has been learned. Everywhere through the new regulations is observable the strong desire to kill mechanism, routine, and Procrustean procedure of any kind. Hitherto, says the order, the teachers used the Socratic

method of questioning and answering orally too exclusively. They guided the children too much, and thus prevented spontaneity.

He wants the teachers to let the pupils have more liberty to use their own words, orally and in writing. This has been the weakest point in German schools. The method in use creates cognitions well enough, transmits knowledge, but it fails to awaken spontaneity and clear judgment, nor does it set in action the child's individual powers. By giving the pupils much freedom to select their own form of expression, they will acquire the power to apply in practice whatever knowledge they have gained. Doctor Kuypers, in his comparison of German and American school methods, touches upon the fact that in American schools less guidance and more self-action is found. This produces the power to help one's self and to judge for one's self.

The new order also urges the teachers to make their pupils acquainted with home and its environments; plants, animals, minerals of the neighborhood should be learned by bringing the natural objects into class or by taking the class on little excursions into the country. Lessons in the open air are recommended, in school gardens and during walks through the parks and the woods. Again, self-activity is urged by advising the beginning of collections of natural objects brought to school by the pupils.

With reference to the criticism that the schools had too great a variety of subjects and that too much matter was prescribed to be memorized, as, for instance, a large number of hymns, Bible verses, and the whole of the catechism, the new order relieves the school by restricting the amount; and, as to grammatical matter, the minister seems to think that the lower schools have hitherto tried in vain to stem the tide of dialectic speech, and hence he suggests less dry grammar and more live speech.

For arithmetic he orders that the excessive work in common fractions be curtailed as "unnecessary." The practical demands of life should determine the matter to be gone over in arithmetic, and in calling the pupils to frame and solve problems consideration should be paid to actual conditions of life. In the upper grades the chief object in arithmetic is to make children solve problems by means of their own methods, not merely by conventional methods; furthermore, rules should not be dictated, but discovered. Self-thinking, self-acting are recommended by the minister for no branch more than for arithmetic and mensuration. He suggests to save time by dropping the senseless practice of dealing mechanically with large sums, with arbitrary measures, and especially the practice of juggling with large common fractions.

History, which has always been an important branch in the lower schools of Germany, both native and foreign, is curtailed in the following words: "In lessons in history presentations from ancient

times and the middle ages shall be restricted to a few of the most important biographies." With regard to religious instruction the minister says: "Lifeless (*geistlos*) memorizing shall not be tolerated, and in matters which require memorizing an overcharge of the memory must be avoided."

In all these branches time may be saved which may be utilized in more frequent reviews of important matters, especially in history, geography, and practical arithmetic. Time saved may also be used in applying modern matters and methods, such as nature study, biological work, physiology, and hygiene. "Quite in harmony with the demands of the present time," says the minister, "Germany's colonies, her world-wide commerce, and modern modes of transportation between the chief commercial centers should be given consideration. In instruction in history it is not the exterior development of the country's power so much as the internal development of the organizations whose aims are the social welfare of the people, which should be discussed."

The minister shows in this new order that he is cognizant of the numerous criticisms to which the German public schools have been subjected by men and women who have visited foreign countries, especially those who came to study the American schools during the St. Louis Exposition, including Doctor Pabst, of Leipzig, Doctor Kuypers, of Cologne, Councilor Dunker, of Berlin, and many others, who frankly pointed out the weak spots in the German schools.

THE SCHOOL OF THE FUTURE A SCHOOL FOR WORK.

[Dr. Georg Kerschensteiner, superintendent of schools in Munich, in an address contributes to the problem of changing the character of popular education, so that it may better prepare for industrial pursuits than hitherto, a solution which finds great approval all over the German Empire. That solution is in fact an adaptation of an American ideal of public-school education, carried into effect in many cities of this country. Doctor Kerschensteiner delivered his address on the occasion of the Pestalozzi celebration in Zurich, Switzerland, a circumstance which gives evidence of the close contact of German and Swiss currents of educational thought. The *Pädagogische Blätter*, in which the following abstract of his address appeared (No. 3, 1908), says: "We have had frequent occasion to refer with approval to Doctor Kerschensteiner's efforts to change the present school, which deals only with words and confines itself to the transmission of book knowledge, to a school that sets free the productive energies of the pupils. The distinguishing features of his Zurich address are, on the one hand, the excellent logical basis of his demand, and, on the other hand, the information he furnishes as to what has already been done at Munich in order to carry out the idea."]

During the period of elementary school age, as in his previous childhood years, the pupil is by no means disposed merely to listen, and passively to take in the knowledge of others. On the contrary, the years of childhood, up to the age of puberty, are usually distinguished by lively activity. The tendencies of the human being at this period are toward work, occupation, doing, testing, experimenting, personal experience, in order to learn incessantly through the

medium of actuality. The whole untiring play life of the child is the direct outcome of a natural, instinctive tendency toward the development of the mental and physical powers under the influence of vital experiences of every kind. Especially where children are not cooped up within the sepulchral walls of a large city, they are all initiative. They discover ever new fields for the indulgence of their desire for occupation, and forget all the world in its exercise. Ninety per cent of the boys and girls, in spite of every effort of book education, prefer by far any practical occupation to silent abstract thought and reflection. With them the saying, practice is better than theory—*Probiren geht über Studiren*—still retains its full value. Only when other people's knowledge contributes to success in their efforts do they prick up their ears to listen; then they devour even books, and not story books alone. In the workshop and in the kitchen, in the garden and in the field, in the stable and in the fishing boat, they are ever ready to work. There they find their richest field for learning. There they find the thousand things which their developing intellect eagerly seizes; there hundreds of accomplishments are developed and apprehended by the unconscious muscular sense; there they feel, above all, the pulsations of social life in their own activities. There they become conscious of the relations which community life establishes between persons, and of the dependence of the smaller upon the greater, as well as of the greater upon the smaller; there they learn to help and to welcome their own folks and the stranger, to comfort the sad, to feed the hungry, to sustain the weary, to encourage the despondent, and, just as in their plays, to strive together, to organize for common effort, and to subordinate themselves willingly.

And now the school opens its doors. Gone is every occupation that had engaged the whole child; gone are all the actualities of home, of workshop, of kitchen, of stable, of garden, of field. Gone is all digging, building, making, every productive activity—gone the whole world of the child. A new, strange world with a hundred riddles and incomprehensible demands and purposes stands before him. Instead of the sand pile, the building blocks, the scissors, the hammer, the whip—slate, pencil, primer, ruler; instead of merry chatting and romancing—silence and listening; instead of the free range of thought in the outer world—strict attention and holding the mind in fixed direction; instead of discovering, trying, experimenting, making—imitation; instead of merry bustle in road and street—sitting still and holding fast; instead of common enterprise under freely chosen leaders—solitary, prescribed tasks; instead of helping the weak neighbor—deliberate isolation that he may not copy. Is it surprising if the little ones at first stand aghast and feel lost, if they become reticent instead of open minded, if their thoughts roam far

away beyond the four walls of the schoolroom in spite of the best intentions, in spite of admonitions and punishments?

Fortunately, in most instances, a gentle-hearted teacher watches over them, and catches the shy birds with love and kindness, removes from their way the big stones that hinder them in their progress on the new and unaccustomed road to knowledge. And the millstones of systematic method grind the hard grains of strange and uninteresting knowledge into flour and pulp, so that even the weakest may absorb the new food. Gradually most of the children become accustomed to the new island of knowledge, to which they paddle twice a day from the continent of their natural sphere of experience, but to which they know not how to build a bridge. Nay, more—they become accustomed to their methods of work and learn to like them. Instead of consorting with actual things, they learn to deal with their shadows; the place of the world of experience is occupied by book knowledge, with the wreaths of honor that the school bestows upon it; the place of the former bold spirit of enterprise in treading unbeaten paths of discovery is taken by arduous labor in familiar and well-worn tracks; the place of observation, of research, and of doubt is taken by swearing by the words of the master.

I should be guilty of injustice were I to ignore the advantages which the school of to-day yields in education, advantages that flow from habituation to work not originally desired, from the fixed organization of the life of the school with its minute regulations, its unyielding severity. Surely the children can here acquire valuable traits of character which we would by no means miss—punctuality, conscientiousness, painstaking, perseverance, regularity, self-control. It must, indeed, be conceded that these moral traits are apt to thrive just where the school does not follow exclusively the inclinations of the pupils, provided the sun of a friendly teacher's heart shines over all.

On the other hand, the school of to-day fails to give to the child, as it enters life, and rather inhibits than fosters, certain active traits of character which most of the children already possessed in embryo when they entered school—the courage of self-reliance, the courage of self-assertion and of the spirit of enterprise, the courage to deal with the new and strange, eagerness to observe and to verify, and, above all, the eagerness to work, not for themselves alone, not merely that they may grow, that they might surpass others and be victorious in the fierce struggle of life, but also that they might place their own rich powers at the disposal of all who need their help.

And thus the question arises: Is it not possible so to transform the school of to-day that it may not lose its good features, but nevertheless become more considerate of the nature of the child, and also

develop those active tendencies of his soul which are now neglected and even permitted to wither? This can only be accomplished if from the very beginning we appeal in all our instruction, more than heretofore, to the productive energy of the child, and this, so far as feasible, within the same range of activities to which he is bound before and during the school period by his personal capacities and economic environment. As to the little child the play room of the home is the workshop of his mind, where the thousands of impressions and stimuli are wrought into an outer, objective world, thus to the older child the workroom of the school should be the central workshop of his activity, from which he gladly turns to the study rooms of the school in order to return ever again to the work-rooms freighted with new treasures which he spontaneously sought.

Our study school must become a work school that is articulated with the play school of earlier childhood.

[Now, although the school of to-day also demands work from the child, it must be remembered that this is essentially mental work, which, on the whole, appeals exclusively to the intellect.]

What the new work school needs is, in addition to the purely intellectual field of work, a rich field of manual work. For in this by far the greater number of human beings find their fertile field of development and support. The school needs, furthermore, those kinds of work which as much as possible are connected with the economic or domestic work activities of the parents, so that the threads which the school spins may not be broken daily when the child returns home. In the third place, the school needs work in the service of the fellow-pupils, which from the first day ever and again preaches the injunction, life means not dominion, but service! Not until the work of the school bears this escutcheon of nobility can it become the foundation of education for citizenship, of an education which every patriot must demand as the first and foremost requirement of the school, and which heretofore, like so many other things, we have thought to find in the mere word. Only common effort yields the feeling of common responsibility, the feeling of the necessity of subordination under common purposes. With that feeling the school enters the warp of social life, into which the shuttle of instruction drives the same thousands of threads and in the same intersections, as the well-ordered home life of the child with its readiness for service, its subordination, its devotion, its unselfish love.

Not for the sake of the various manual accomplishments only do we need the workrooms; not that our compatriots may retain interest in practical work; not that the children may learn to plane, saw, file, bore, sew, weave, and cook; not that they may love the work of their hands; no, we need it, above all else, that we may educate human beings, who will appreciate the purpose and value of national unity

to its roots, and gratefully give it service. We need it, because culture does not rest on the book, but on work, on devoted, self-sacrificing work in the service of fellow-men, or of a great truth.

We need it also because of the greatly varying endowments of the children. For only when we take account of these will our education and instruction be successful; when we fail to do so, we can only painfully drill. The Mannheim system of school organization in its full extent is expedient only in the study school and the instruction of pupils in mass connected with it. In the workshop, in the laboratory, in the school kitchen, in the school garden, in the room for drawing, in the music room, every child finds the work it is able to do. Here the weak works at the side of the strong, and is helped by him, or can or should be so helped. Here, side by side, the younger and the older children can feel the joy and the value of success in work adapted to their several degrees of ability. Here they need not all march in rank and file. For here, where mere memory work is eliminated, the value of the outcome of the work is of less moment than the value of the method of work. Here "individualizing of instruction," heretofore the most deceptive pet phrase of our mass organization of listeners, requires no effort on the teacher's part; here it appears spontaneously.

[Doctor Kerschensteiner is not satisfied with mere theory. What he has actually accomplished he relates as follows:]

First of all, in 1896 I succeeded in making instruction in cooking an obligatory subject in four weekly lessons in all the eighth grades for girls, and in gaining from this a fund of experience for the instruction in chemistry, physics, and physiology, as well as arithmetic for the girls. A few years later school gardens were established in all the schools whose yards permitted this. Among these the care of the school kitchen gardens was assigned especially to the girls of the eighth grades. At about the same time the aquaria, terraria, bird cages, and caterpillar boxes were introduced into the schools, as well as the care of flowers in the third and fourth grades, among the pupils of which more than 10,000 bulbs were distributed for cultivation yearly.

Then, in 1900, we succeeded in connecting with all eighth-grade boys' classes workshops for wood and metal work, with six obligatory weekly lessons. These furnished, in the next place, the store of experience for drawing, for instruction in mechanics, geometry, and arithmetic. In 1903 the reform of instruction in drawing was begun, which from the beginning was placed in the service of decorative art, and, thereby, of the productivity of the child, a venture in which I was more and more encouraged by my extensive researches in the development of the talent for drawing in the child.

Finally, last year, we succeeded after fierce struggles in establishing also for physics and chemistry obligatory laboratory instruction for the eighth grades, with four lessons weekly. This, in spite of the violent attacks to which it is still exposed, will not only persist, but will sooner or later be established also in the seventh and sixth grades. This will depend, above all else, on the spirit of the instruction, on the manner in which the teachers conduct it, for whom it signifies a wholly new way of teaching. If the experiment is successful, of which I have no fear, the following years will raise the question whether it will not also be possible to utilize workshop instruction in the service of laboratory instruction, as already to-day sand boxes are found to be valuable in the service of geography. Thus, step by step, the ground is being dug away from under the old-time book instruction, and I am full of hope that the unconquerable idealism of our teachers and the irrepressible force of the old yet ever new idea will steadily increase the tendency toward the transformation of the old school routine.

When I see the beaming eyes, the glowing cheeks, and the irrepressible delight in work of the boys and girls in our workshops and laboratories, in our school kitchens and school gardens, I see therein the best proof of the fact that we are on the right road. There even those wake up who, sitting at their desks, were looked upon as indolent, stupid, or negligent, and who, doubtless, would have been assigned to classes for the backward had we possessed such. Nay, with us it is not of rare occurrence that such troublesome children far surpass their fellow-pupils gifted with better memory, and that their success, and the praise that never had come to them before, arouses them from their indolence and their dream life, so that henceforth they try to devote themselves to their intellectual work with greater interest. What dreary languor prevailed even six years ago in our drawing lessons, when the straight line, the arc of the circle, the geometrical figure, the abstract ornament occupied the throne of art, and the real talent, as well as the creative fervor of every child, was at a loss as to what to do with them! How different all this became, when the things of the home, of the workshop, and of the garden entered, and the children could exercise their love for drawing and their creative instinct in the construction and decoration of things of daily use, the weak with their scanty means, the gifted with the entire wealth of their imagination! What an atmosphere of joy pervades to-day all the drawing classes; what an amount of decorative and constructive inventive talent is suddenly liberated and leaps from the formerly so isolated school island over into the home life, like the flaming sparks of a great conflagration, that fire all things combustible within their reach! With what

delight individual children now lug to their classes even their home work, and surprise teachers and fellow-pupils with proofs of skill which no one had suspected before!

The greatest progress in the transformation of the study school into a work school has been made in Munich, in our supplementary or continuation schools for boys. There in reality the boy, with all his practical interests, is at the center; there all instruction has its source in the workshops and again returns to them; there an actual trade or vocational school is possible, which will be forever excluded from the elementary school. In consequence of the strict organization on the basis of trades that brings together only boys of the same occupation, the workshops are at once pervaded with the spirit of common interest and solidarity, and, because of the evident devotion of masters and journeymen to the task of instruction, also with the spirit of confidence and mutual respect. At first the new arrangements were the occasion of much scoffing and disparagement; but already to-day scorn and jest have been silenced, for the value of the work appears ever more clearly. Even to-day, it is true, there are those who call my laboratories useless play, and who put serious obstacles in the way of their establishment. But the time will come, as surely as the day follows the night, when men will not understand how it was ever possible to teach otherwise.

[When, in another place, Doctor Kerschensteiner says that it will be possible to realize these ideas more easily when "the education of teachers itself shall be permeated by the wholly new spirit of the work school," he touches upon a problem which normal schools are beginning to appreciate in its full importance. Prussian and Saxon normal schools are attempting to conduct their instruction in natural sciences on the proposed basis. May they be successful. For that these ideas will rule the future, Doctor Kerschensteiner's address has clearly shown.]

RESULTS OF SCHOOL EDUCATION IN PRUSSIA.

The Annual Report of the Commissioner for 1907 contains, in a chapter on education in Central Europe (Chapter V), an account of an examination of elementary pupils whom the compulsory-attendance act had drawn into the continuation (or evening) schools, and who, it was alleged, were insufficiently prepared for the work in industrial and commercial continuation schools. The results of this and similar examinations were made the subject of an interesting parliamentary debate in the Prussian Diet on the occasion of considering the appropriation bill for the department of public education. Extracts from that debate may show that the question of popular education is quite as important in Prussia now as it was in the early part of the

nineteenth century, and also that the Germans indulge in self-criticism without reserve.

The following is a synopsis of the proceedings of the Prussian house of representatives on elementary continuation and normal schools, February 17, 1908. The discussion dealt with the motion of Representatives Schiffer (of the National Liberal party), Fischbeck (Liberal People's party), and Ernst (Liberal Union party) requesting the government to furnish detailed information concerning (1) the results of recent inquiries made by the minister of commerce as to the pupils' preparation for continuation schools; (2) the attitude of the minister of instruction with reference to these results; (3) the measures for remedying shortcomings in the elementary schools that may have been revealed.

SCHIFFER (National Liberal) declared that essentially this motion, like a similar one which in the preceding session of the house had been abruptly referred to a committee and not acted upon by the latter, related to certain investigations that were made, the first one in 1904, by the minister of commerce as chief of the Prussian industrial bureau. At that time, in response to complaints of teachers of the continuation schools, examinations were undertaken in the spring of 1904; 4,336 papers in the German language and 4,332 in arithmetic were gathered in. The result was summed up by the minister of commerce in the statement, "On the whole, results are not satisfactory." Taking into account the naturally cautious phraseology of high responsible officials, the speaker found in this expression "a most incisive criticism of the work of the pupils of the continuation schools," and pointed out that naturally this criticism applied ultimately also to the elementary schools; for, inasmuch as it concerned pupils who had just entered the continuation schools, badly taught pupils of these schools are badly taught pupils of the elementary schools.

A further investigation, the speaker went on to say, was made in the following year by the German Association for Commercial Instruction. It extended to 6,109 pupils. The result was extremely unsatisfactory; about two-thirds of the examined pupils could not, in their work, reach the mark of sufficiency.

In the following year the minister of commerce ordered a second, a more extended and more thorough, investigation, from which 16,000 examination papers were gathered in. Doubts that had been expressed with reference to the first inquiry had been fully considered; the examination questions had been specialized; it was taken into account whether or not the pupil had completed the course of the elementary school; notice was taken of local conditions, and also of the fact whether or not some years had elapsed since the completion of the course of the elementary school on the pupils' part. This material was collected a year ago. It was subjected to a preliminary examination, which

confirmed the results of the former inquiries. The entire material was then turned over to the Prussian statistical bureau, since which a year has elapsed.

Assuming that there had been sufficient time to complete the work, the speaker desired to know, in the first place, from the minister of commerce what were the results; but he also wished to know the attitude of the minister of instruction toward the question at issue. The investigation did not, indeed, cover the entire field; yet things were evidently not what they ought to be, if three successive though partial investigations yielded the same unfavorable results. This view was confirmed "by the general opinion among industrial and professional men, who are loud in their complaints concerning the educational equipment of the young people." He continued:

Instruction in our schools rests upon antiquated and, therefore, false regulations and rules. The equipment of the schools is usually confined to a minimum—a map of the home province, one of Germany, one of Palestine. A map of Europe is not prescribed, nor one of the hemispheres of the earth. Consequently, if the local community refuses, the Government can not demand them, and this in a time of our present world commerce and of our colonial policy. This brings me to the neglect of object teaching. It will become necessary for us to inquire whether there is not an excess of memorizing in our schools. Again, in its external relations, the elementary school demands improvement. The overcrowding of classes interferes in many ways with the attainment of the ends in view. Furthermore, it is complained that excessive and too formal supervision compels show work, which endangers a continuous development and consideration of the individuality of pupils. The questions of the lack of teachers, of the frequent change of teachers, of the emigration of teachers, of the organization of teachers—all these have their bearing. * * * On the problem of popular instruction rests the entire future of the State. The thorough instruction of our youth is not a luxury, nor is it a mere historic obligation upon us as the nation of thinkers; it is a bitter and serious necessity. Therefore we expect that the educational committee will take this difficult problem in hand promptly and effectively.

The minister of instruction, DOCTOR HOLLE, in reply stated that, according to a communication from the minister of commerce, the results of the last examination of the pupils of the continuation schools were not as yet worked out; that in this matter he was in perfect accord with his colleague, and that both of them did not consider the results of the examination satisfactory for the elementary schools. But he emphasized the fact that in many cities the examinations were not general, but children were tested here and there at hazard; and that a large part of the pupils had completed the work of the elementary school a considerable time before entering the continuation school, hence had perhaps forgotten much. He continued:

Nevertheless it must be admitted that the collective result of this examination justifies general conclusions, and among these is the one that, unfortunately, the pupils of the elementary school leave school with varying educational attainments. The reasons for this are manifest: The differences in home con-

ditions, in talents, in diligence, etc. The results attained in different schools are naturally extremely varied. The overcrowded half-day school can not achieve the results which a well-organized school of six classes, with efficient teachers, can reach. This leads to the conclusion that it must be exceedingly difficult to establish a uniform method of instruction in the continuation schools for pupils whose attainments are so varied. That the pupils leave the elementary schools with different acquirements is explained, therefore, by existing conditions.

This is a problem which probably will never be fully solved. But the educational administration should constantly strive to raise the average outcome. In this, in the first place, external measures are to be considered, such as reduction of distance from the schools, the avoidance of overcrowded classes, etc. One obstacle in this is found in the manifold diversity and vagueness of the legislation on the subject. The new law regulating the maintenance of the elementary schools will furnish a firm basis for improvement. I would also point to the increase of the fund for the establishment of new positions for teachers from 300,000 to 400,000 marks. My predecessor deserves much praise for his efforts to meet the lack of teachers. From 1901 to 1907 the number of teachers' seminaries has been increased from 118 to 156; but the course embraces a period of six years, and the benefits of the measure will, therefore, appear only gradually. I hope that the house will join us in our efforts, and continue its support in the establishment of new seminaries.

However, there is needed improvement, too, in the inner conditions of the elementary school. For this purpose the new course of study for the training of elementary teachers was issued in 1901. This, too, can demonstrate its value only gradually, because annually only a relatively small number of new teachers enter the schools. It is, furthermore, my opinion that teachers frequently do not adequately adjust their instruction to local conditions, and only recently I directed their attention to this point. The differences among the pupils and the differences in domestic conditions will, however, always operate against a complete solution of this problem. Yet we should endeavor to come as near our ideal as possible. To employ its whole energy in this direction should ever be the endeavor of the administration. I hope that with the help of the teachers we shall succeed in this.

VON DITFURTH (of the Conservative party) promised the support of his political friends in all that concerned the welfare of the elementary schools; he was not prepared, however, to acknowledge on the basis of the results of the investigation that there were serious defects in the organization of the elementary schools. What was needed, in his opinion, was not an examination for admission, but an examination for discharge from attendance upon the continuation school, in order to obtain proof as to the amount of knowledge acquired. The defects of the elementary school, he held, were due in many cases to external conditions. "One of the chief defects of the elementary school," he concluded, "is to be found in the effort to teach too many things, whereby it becomes impossible to concentrate the instruction. We grant that the children should learn something about the colonies. But if teachers are to give instruction about school hygiene, social politics, political economy, automobile

affairs, and other things, the work of the teacher loses itself in details, and its educative character is lost."

KESTERNICH (of the Center party) protested against the degradation of the elementary school into a preparatory school in a general system of obligatory continuation school instruction. Himself a teacher, he did not look upon examination as a reliable test of the work of the elementary school. The examination for admission to the continuation school, he held, should always be in the hands of teachers of the elementary school. "The layman is inclined to form an unjust judgment. He does not know how to think with the child; many of them forget that the knowledge they gained at school has been deepened by the experience of life; if they could see themselves again in the intellectual poverty of their childhood, they would feel inclined to revise their unfavorable judgment of the elementary school." Moreover, the influence of apprenticeship, under which the majority of the boys come, should not be overlooked; therefore the examination for admission should, in justice, be preceded by a review course extending over several months, as was the case even with lawyers, before they entered the state examination. "How can we expect the graduate of the elementary school," he added, "who deliberately forgets everything that reminds him of the work of the school, to be ready on the spur of the moment to serve as a test for the efficiency of the elementary school?"

After asserting that the school satisfactorily accomplishes its chief duty, that of providing good instruction in reading, writing, and arithmetic, he admitted that there were also some defects. "Among these," he continued, "is the excessive attention given to realistic studies and to exercises in gymnastics and drawing at the expense of the three principal branches. I would therefore request the minister of public instruction to limit, at least to a minimum, the instruction in geography, history, nature study, gymnastics, and drawing." Another obstacle to effective work he found in the hobbies with reference to methods, and requested the minister to consider, in the appointment of district inspectors, primarily the teachers of normal schools and not to confine himself to philologists (university graduates).

RZESNITZEK (of the Free Conservative party), after complimenting Prussia's interest in the development of the elementary school and its extensions, advocated further regulation of salaries and appointments; the requirement of university preparation for teachers in normal institutions and the establishment of scientific extension courses for those already appointed; provision for assistance in the support of the elementary school on the part of the State in case of

need; statutory regulation of the size of classes, of the appointment of new teachers, and of the equipment of new class rooms. He closed with words of approval of the efforts of the minister of instruction to meet the dearth of teachers, and with the request to obviate changes of teachers by uniformity in salaries and by doing away with the vacation periods in connection with such changes.

DOCTOR HOLLE, the minister of public instruction, expressed himself in favor of opportunities for promotion on the part of teachers of the elementary schools in addition to their prospect of advancement to positions in normal schools, and promised, amid great applause, their consideration as candidates for the district inspectorship (i. e., county superintendency). He admitted the desirability of regulating the salaries of teachers in preparatory schools and normal schools, so as to induce them to retain their positions, and promised consideration of this matter. He announced the early promulgation of regulations for principals, granting teachers all possible freedom in their work, and closed with the following words:

It is constantly asserted, and justly so, that the condition of the teachers needs improvement and that all school questions are essentially teachers' questions. The work of the teachers determines the character of the work of the entire system of public instruction. I would, however, emphasize in this connection that the Prussian teachers of the lower schools have fully met every expectation of the school administration and that the teachers are to be credited with all that our schools have achieved.

EICKHOFF (of the Liberal People's party), approving the position of the minister, directed attention to the need of improvement of the inner organization of the people's schools, whose course of study, he claimed, must be modernized. He did not believe that other countries, e. g., France, had overtaken Prussia, but he agreed with Representative Schiffer in his demands for more object teaching, pointing to America as a possible model or example. He concluded:

Our fatherland is developing into an industrial country. Upon our world commerce rests the entire economic development of the country; the sons of our people in the lower, as well as in the higher strata, must be equipped with the means which will enable them to meet the competition that will decide the future of the nation. Therefore the methods of instruction must be reformed and adjusted to the change in economic conditions.

ERNST (of the Liberal Union party) emphasized the view that the defects of the elementary school were due, not to lack of diligence on the part of teachers, but to external conditions already enumerated. He criticised also the bureaucratic tendencies of some school inspectors, leading to the assumption "that in some parts of the country the center of gravity in the school lies no longer in the personality of the teacher, but in the office of the supervisor." His chief stress was upon the need of a revision of the course of study with a view to

relieving the elementary school of burdens, especially in the lower grades. He said:

It is to be regretted that the ideas of Fröbel are so little followed among us. * * * The school can only proceed on the basis of what the child brings to it. Now, unfortunately, a great number of families lack the time, possibly also the desire, to occupy themselves with their children under school age. The child goes astray or remains stagnant in development; upon the State rests the responsibility of doing much more than it is doing.

After further complimenting the minister of instruction upon his attitude, he added a criticism of the despotic methods of some supervisors in examinations of children, and amid great applause expressed the hope that the labors of the house committee would lead to the establishment of a commission of reform for the lower schools.

DOCTOR HACKENBERG (of the National Liberal party) was not fully in accord with the critical remarks of his party colleague Schiffer, nor with the speakers who followed him. The purpose of the resolution, he held, was not definitely to criticise possible defects of the elementary school, but to ask for full information on the subject, and to assure the minister of the fullest sympathy in his efforts to obtain relief. He rejoiced in the promise of the minister to exert himself in the removal of external obstacles, but regretted that he had not expressed himself as to the general need of changes in the course of study and in the entire management of the schools, now regulated by statutes of more than thirty years' standing.

We are far from asking again and again for new experiments for the lower schools, and it may be possible to pass over certain defects in the regulations and courses of study, since ultimately the essential is not the written statute, but the personalities of the teachers and of the supervising officials.

He did not go into details except on one point, as follows:

It is possible also to economize energy, especially in small schools of one room. Too much is prescribed in the course of study for the children and for the teacher in the lower grades. The necessary consequence must be that these youngest pupils, who need constant supervision and guidance, are trained in indolence, carelessness, and slipshod ways, because the teacher is absolutely unable to give them the necessary attention.

He rejected the suspicion that the movers of the resolution contemplated the overburdening of the school with matter of instruction. Overburdening does not depend on the number of subjects of instruction; to obviate it, reliance should be placed on the skill of the inspectors in giving directions, and, above all, on the freedom allowed the teacher in the selection of details.

With reference to the criticism of the scanty equipment of the people's school on the part of his party colleague, Schiffer, he inferred that the latter had taken his illustrations from sections of the country which were far in arrear in these matters; he himself,

interested for thirty years in schools, had found no instances that bore out these strictures. He summed up:

The liveliest interest for the elementary school, for its work and its success, induces me to put this motion, and induces the house, as I rejoice to say again, to concur in its principle. I have not the least doubt that the representatives of the minister will furnish us, from the experiences in the several provinces with their varying school organizations, sufficient material to enable us to examine what defects exist; if we should find here or there some things good which elsewhere are defective, we shall heartily rejoice; but if we find things that call for improvement we shall, as far as possible, enact the needed measures; for what we do for our Volksschule we do for our people and for its future welfare.

HECKENROTH (of the Conservative party) expressed sympathy with the motion in the name of the Conservatives, and also the hope that the committee submit definite proposals. After reviewing in some detail the external and internal difficulties mentioned by the minister, he recommended especially, "in order to secure better cooperation on the part of the family, the emphatic support of kindergartens by the State, and criticizes the tendency of school inspectors to interfere excessively with the management of the schools." He, too, promised the support of his party in all that concerned the improvement of the elementary schools.

The motion was then referred to the committee on public instruction.

GYMNASTICS IN GERMAN SCHOOLS.

Physical exercises in German lower schools, which used to have a regular place on the daily time table, seem to be in danger of extinction, since women teachers gradually increase in number, and men are lured away from the profession of teaching into channels of commerce, industry, agriculture, and mining, into the learned professions and technological pursuits, in all of which better incomes are offered than in the service of education. The "Statistik des deutschen Schulturnens" reports:

Of the 30,000 people's schools of Prussia, already 400 have no gymnastics for girls at all, owing to the lack of men teachers, and in many others the branch, physical exercises, is slighted. Conforming to the course of study decreed by Minister Falk in 1872, physical exercises on apparatus (horizontal bar, parallel bars, ladder, rope, horse, springboard, etc.), either in gymnastic halls built for the purpose or in the open air, were for several decades as regularly conducted as exercises in arithmetic, but the statistics of 1904 show that of the 30,000 schools only 1,800, or 6 per cent., have kept up this practice faithfully; 94 per cent have begun to slight gymnastics more or less, either in the lower grades or in all the grades.

Since 1904, when that report went through the press, the state, provincial, and city school authorities have awakened to the necessity

of doing something to counteract physical degeneration. New regulations and rigorous supervision have put new life into this branch of the curriculum, but since the true cause, lack of male teachers, is operative in an ever-increasing degree, it is expected that gymnastics will go down, as they have had a tendency to do in every country where women teachers predominate.

In the Prussian Diet the danger was discussed recently and the gradual disappearance of gymnastics in rural schools was lamented, though some members indicated that the pupils of rural schools perhaps needed gymnastics less than city children, since the former enjoyed fresh air, had more exercise in walking, and a good deal of muscular exercise in working in gardens, dairies, and in the fields and woods. It is the city children who lose the great benefit of muscular exertion, unless the recent movement in behalf of playgrounds can counteract the loss indicated.

Several ministers of education in Germany have recently ordered that women teachers undergo regular instruction in gymnastics, and pass an examination to enable them to train their girl pupils properly indoors and outdoors.

COEDUCATION IN THE PUBLIC SCHOOLS OF PRUSSIA.

While in the German press the idea of coeducation of the sexes seems to gain ground, and while in secondary schools and in higher institutions women students are admitted, the practice loses ground in the lower schools. The number of classes or schoolrooms increases rapidly, even in small towns and villages, which reduces the number of pupils to the teacher, but the separation of the sexes increases. In 1886 there were in Prussia 4,838,247 children in elementary schools; of these three-fourths were taught in mixed classes. Twenty years later, in 1906, the number of coeducational classes was only two-thirds of the whole number; that is to say, the number of classes in rural and other small school districts in which the sexes were separated has risen from 4,206 in 1886 to 9,180 in 1906. Coeducational classes are found chiefly in small towns where grading is difficult, and in rural districts which maintain ungraded schools.

CHILDREN'S MEMORY AND THEIR CAPACITY TO LEARN.

Since time immemorial the view has been entertained that in childhood the capacity to learn new things, and to keep in memory things learned, is strongest. This opinion, though not materially shaken, needs a slight modification, as Professor Groos, of the Giessen Uni-

versity, attempts to prove in his new work, *The Soul Life of the Child* (*Das Seelenleben des Kindes*). We can, according to Ebbinghaus, compare by means of tests the learning capacity of several persons, by determining the number of repetitions necessary for each to memorize a line of syllables strung together without expressing sense. Six of such syllables are memorized at once; 10 such syllables require from 3 to 7 repetitions, 12 need 14 to 16 repetitions, and 16 syllables require on an average no less than 30 repetitions.

It has been proved, however, that in the child the capacity to learn is as yet very little developed; that an increase in this capacity does not begin until the tenth year of age; that during the time of adolescence an interruption in the process of mental development takes place, which is followed up to the twenty-fifth year of life by a notable acceleration. It is true, as Groos emphasizes, that such tests are to be viewed with great caution, since the child in learning such syllables, senselessly strung together, feels no interest, while the child of more advanced years takes an interest in the test itself and is thereby aided in memorizing.

It is well known that children can memorize in an astonishingly brief time verses (jingle-rhymes, for instance) which please them; that is, either verses which convey ideas to them apperceived by ideas previously acquired or verses which appeal to their esthetic sense through smooth rhyme and melody. The capacity to retain—that is, the memory—may be tested experimentally by having the memorized matter recited at regular intervals, counting the number of repetitions required for the purpose and comparing it with the number needed when first learned. By so doing it has been proved that the child's memory has the advantage over that of the half-grown and the adult person. According to Wessely's investigations, the average memory of pupils of senior grades and of colleges in memorizing poems anew was somewhat weaker than that of younger students, say of middle grades, and much weaker than that of children. Latin words, according to other systematic tests, were best learned by pupils at the age of 12. Experience, as well as systematic tests, have shown, however, that facts, especially such as can be acquired through reasoning, being the final expression of cause and effect, are learned by older students without appeal to the memory.

All of this goes to prove that adults surpass the child in learning when interest, will power, and apperceptive material aid them, but that the capacity to acquire mechanically and retain that which is thus learned is far greater in childhood than in advanced years. This result of systematic tests is quite in accord with the experience of daily life, and simply confirms an old truth. But it does more; it suggests to the teacher that it is quite in accord with nature's processes to allow children below 10 years of age to acquire knowledge by

means of mechanical memorizing, and that it is futile to appeal much to the understanding in the primary grades; furthermore, that as the pupils grow in years appeals to matters previously learned are increasingly useful, and that the practice of mechanical memory drill should gradually give way to a method which builds upon previous cognitions, guides the pupils from cause to effect, or vice versa, and enlists the individual interest and will power of the pupils.

To German teachers these conclusions teach the lesson that the Socratic, or oral, method, which has been exclusively practiced in that country for centuries, is not preferable in childhood, but that its proper place is during the age from 10 to 14 and later. Students of high-school and college age should rely little on mechanical memory drill and more on argumentative acquisition and on self-active discovery of knowledge. Of course there is no hard and fast rule concerning methods of teaching; each teacher must find the way best suited to the age and individuality of her pupil. It is pleasing to Americans, though, to notice that late psychological investigators intimate that our method of early mechanical drill, so frequently criticised, is the right one for childhood, though inappropriate for later years.

EXAMINATION OF WOMEN SCHOOL PRINCIPALS IN PRUSSIA.

All teachers of elementary schools in Prussia, as well as in most other German States, men and women, have to undergo an examination for principalship if they aspire to such a position, while the graduation diploma of a normal school qualifies them to accept a position as class teacher. This examination (called *Oberlehrer- or Oberlehrerinnen-Examen*) is so arranged as to permit each candidate to select two approved branches in which he or she is to be examined. Since all candidates are normal-school graduates and have been teaching for a number of years, the other branches are omitted. The selection of branches is therefore significant, for it plainly indicates the preferences and talents of the examinees.

During the last thirteen years—that is, since 1895, when women were first admitted to the examination for principalship—only 473 examinees have passed, or 1.92 per cent of the total number of women teachers, while of the men 5.65 per cent have passed. The most interesting feature of these examinations is the selection of branches on the part of the women, showing that they prefer the forms of knowledge, while men prefer the substance, as will be seen from the following figures:

Of the 473 women who passed, 270 had selected German, 176 history, 152 English, 144 French, and 85 religion; but only 62 had selected mathematics, 21 geography, 18 botany and zoology, and 13

physics and chemistry. The following partial list goes more into details:

Subjects chosen.	Candidates.
German and history	89
German and English	65
German and French	57
History and a foreign language	54
French and English	38
Religion and German	34
Religion and history	24
Religion and a foreign language	20
Mathematics and a foreign language	20

Other possible combinations occurred only in a few cases. Mathematics and natural science, for instance, were chosen only by 7. Hence it is plain that women evince interest and talent chiefly in the humanities, a fact which the authorities will bear in mind in planning the girls' secondary schools.

The men's preferences in choosing branches to be examined in lean toward mathematics, natural history, biology, natural science; in short, branches which deal more with what the Germans call "Realien," i. e., real knowledge in contradistinction to forms of knowledge.

EDUCATION OF WEAK-MINDED CHILDREN IN GERMANY.

Mrs. Franz Weigl reports in *Soziale Kultur* that 73 cities of Germany have established auxiliary schools for weak-minded children. An inquiry into the subsequent life of most of the pupils of these schools revealed the following results:

Pupils found completely self-supporting.		Pupils found partially self-supporting.		Pupils remaining dependent upon others.	
Per cent.	Number of cities.	Per cent.	Number of cities.	Per cent.	Number of cities.
10-20	3	0-10	9	0-10	31
20-30	3	10-20	16	10-20	10
30-40	8	20-30	6	20-30	3
40-50	6	30-40	13	30-40	3
50-60	5	40-50	6	45-50	2
60-70	12	50-60	2	50-60	4
70-80	9	60-70	6		
80-90	15	70-80	1		
90-100	2	100	6		

These results are surprisingly gratifying. In 43 of the 73 cities between 50 and 100 per cent of all the children in special schools turned out to be self-supporting after leaving school, and many of the others were not entirely helpless, but could earn enough and were intelligent enough to lead useful lives. These results are the more

gratifying when compared with Doctor Stelzner's report, who investigated the lives of 200 weak-minded persons who had not received instruction in auxiliary schools for backward children. She found that of that number 44 had been convicted as hopeless tramps, 19 for begging, 146 for larceny, 10 for housebreaking, 3 for forging, 8 for fraud, and 5 for assault. The sum of convictions being 235, shows that some of these unfortunates had been convicted repeatedly.

CRIPPLED CHILDREN IN GERMANY.^a

The statistical bureau of the Grand Duchy of Baden published recently the results of an inquiry into the number of deformed children of school age in Baden. There were found 2,763 children between 6 and 14 years of age who suffered in consequence of inherited or accidental physical defects or loss of limbs. It was found that many of these 2,763 children (among whom were 31 deaf and 7 blind) were mentally deficient, i. e., one-tenth of them were nearly or wholly idiotic. It was found also that among each 1,000 inhabitants 1.4 were seriously or only slightly deformed, and this is precisely the same proportion that was found in the entire Empire of Germany in 1905. That there should be more crippled boys (57.3 per cent) than crippled girls (42.7 per cent) needs no explanation. Of the 2,763 children enumerated in Baden, 2,372 attended elementary schools, 141 secondary schools, 43 schools for the feeble-minded, and 18 were taught by private teachers. In 2,583 cases the parents themselves, in 79 cases the poor-relief fund supported the children, in 92 cases small aid was rendered the parents, in 101 cases the children were supported by relatives. In 791 cases successful operations had been performed, 633 operations had ameliorated the condition of the children somewhat, while in 573 cases attempts to cure the deformities had proved unsuccessful.

CARE OF DEPENDENT CHILDREN IN PRUSSIA.

The last Prussian report on "Fürsorge-Erziehung" (1906) states the results of four years. Since 1901, when a law was passed concerning the education of children who require special care, being either criminally inclined or subject to criminal influences through their environments, the increase of such children has kept pace with the increase of the population. The number of such children was 6,523 (4,359 boys and 2,164 girls) in 1903; 6,458 (4,303 boys and

^a For further information on this subject, see Chapter XI of this report—"Schools for Crippled Children Abroad."

2,155 girls) in 1904; 6,636 (4,375 boys and 2,261 girls) in 1905; 6,923 (4,591 boys and 2,322 girls) in 1906.

Concerning their ages the report says: "Two and seven-tenths per cent were less than 6 years old; 29.5 per cent were between 6 and 12; 67.8 per cent were between 12 and 18." Sixteen per cent of all these children in 1906 were illegitimate, a considerable decrease since 1904. On the other hand, the number of families of which father or mother, or both, had been convicted of crime had slightly increased. The number of such neglected, though not always depraved, children is proportionately greater by far in large cities than in small communities.

There were in communities of less than 2,000 inhabitants, 1,226 such children; of between 2,000 and 20,000 inhabitants, 1,614; of between 20,000 and 100,000 inhabitants, 1,474; of over 100,000 inhabitants, excluding Berlin, 1,808; Berlin alone contributed 801; making a total of 6,923.

In Prussia, as well as in other States of the German Empire, such children are assigned by the juvenile courts to private families, the heads of which report to the probation officers, or directly to the court, at stated intervals, how the children are progressing, and the children's school-term reports must be shown. There is now a perfect system of juvenile courts in German cities, a recent law having designated the probate courts of each judicial district to act in cases of juvenile criminality and in cases of neglect. These courts were selected in 1907 to act as juvenile courts, because the judges of such courts have heretofore dealt with the care of orphans.

It was the city of Frankfort on the Main which, following the example of some cities in the United States, appointed separate judges for juvenile criminality. The Prussian legislature took the matter up and passed the law which added the functions of juvenile courts to those of the probate courts in the kingdom. While it may be supposed that some of these judges are not ideal judges of children's peccadillos, it is reasonable, on the other hand, to think that there will be many men among them quite fit for the office, since their former duties included the care of orphans.

FEEDING SCHOOL CHILDREN IN BAVARIA.

Miss Eugenie Abresch gives an account (in *Die Lehrerin*, No. 50, vol. 24) of the efforts made in Bavaria (south Germany) in feeding children so as to secure the greatest regularity and punctuality. An inquiry set on foot in 18 cities of the Kingdom revealed the fact that in 12 of them regular meals are provided, in the other 6 sporadic efforts are made whenever necessity demands them. In none of the

12 cities is it charity only which suggests the measures, but pedagogical considerations also prompt them. In 3 cities, Ludwigshafen, Landau, and Zweibrücken, to which may be added Nuremberg, breakfast is offered. In 10 cities breakfast and a midday meal, luncheon as we would call it, are served, namely, in Munich, Nuremberg, Würzburg, Bamberg, Tützing, Passau, Bayreuth, Pirmasens, Kaiserslautern, and Neustadt. In Ludwigshafen alone breakfast and a liberal dinner are served.

In Ludwigshafen indigent children are given, before school opens, a quarter liter of warm milk (not skimmed) and two rolls. During the winter of 1906-7 as many as 1,230 children, or about 10 per cent of all the children attending the lower schools, received breakfast, which cost the city \$1,420. The milk supply is controlled by the health authorities. In connection with Ludwigshafen, Mannheim should be mentioned, situated on the opposite bank of the Rhine. This city in the Grand Duchy of Baden paid \$5,121 during the same year for milk and rolls given to 15 per cent of its school children. The school authorities of the Bavarian town of Zweibrücken paid as much for breakfast given to 10 per cent of its school children, but they did so only during four winter months. Nuremberg gave breakfast only in extreme cases of poverty.

The cities whose school authorities gave warm luncheon number 9, 4 of which derive the means for this from private endowments. These 9 cities vary in the proportion of children participating in the meals between 1 per cent and 5.5 per cent, the difference resulting not so much from the greater or less degree of poverty found as from the degree of sympathy of teachers and school officers. These mid-day meals are more or less substantial; all include nourishing soup with bread, some kind of meat with vegetables, and some kind of pudding (Mehlspeise). Since every meal is presided over by the lady teachers, the children can be taught table manners.

Mothers who can not afford to leave their workshops in the middle of the day to prepare their children's dinner make arrangements with the teachers to let their children take part in the school dinners. Hence the ones around the hospitable board in the gymnasium hall of the school rarely know who are charity guests and who are not. All are served alike, all learn nice table manners, and practice cleanliness and good companionship.

THE WORK OF SCHOOL PHYSICIANS.

The variety of duties of the school physician is illustrated interestingly in the last annual report of that official in the city of Mannheim. Aside from general hygiene of school and home, the report deals with the individual conditions of the pupils whom the physi-

cian examined, a labor in which he was aided by the teachers. In order to enlist the latter's sympathy and create comprehension of hygienic requirements he delivered before them a series of systematically arranged lectures. During regular office hours, which were long and frequent, he examined not only young candidates for vacation colonies, but other children whom the teachers considered subjects of especial care, namely, 843 boys and 1,514 girls.

Among the boys were found 140, among the girls 280, who needed attention, chiefly owing to impaired eyesight, and explanatory letters were sent to the parents. Of the 140 boys, 59 per cent were placed under physicians' care; of the 280 girls, 62 per cent. For vacation colonies and salt-water baths nearly 12 per cent of all the school children over 10 years of age applied, but only 24 per cent of the applicants could be accommodated, owing to the limited means at the disposal of the authorities. The selection was made according to the physical necessities of the different cases, as well as to the social conditions and environment of the children; 308 were selected, of whom only 19 slept alone at home.

Children recommended by their teachers for admission to auxiliary schools or classes for the weak-minded were all examined by the school physician. Among these pupils were found 39 per cent of boys and 40 per cent of girls who were hard of hearing. In classes for the normally endowed there were still 17.3 per cent of boys and 18.8 per cent of girls with somewhat defective hearing. A complete record of the physical and mental condition of each male pupil graduating from the auxiliary schools was prepared and handed over to the civil authorities for the future use of the army recruiting officers. Likewise a record was prepared in each case where the juvenile court decreed that a child be taken into especial care, criminal propensities or evil influences in the child's environment having been proved.

As a result of former dental examinations and in accordance with the experience of Strassburg, Frankfort, and other places, a regular dental clinic was established. Every child ready to enter school at 6 years of age was physically examined, and 5.5 per cent of them all were denied admittance owing to lack of sufficient physical or mental development. All these examinations required time and great care, but they were eminently beneficial for the entire school system.

Former measurements of height and weight of pupils were continued, so as to complete the records kept. It was found that the average height of the pupils had slightly decreased, while the average weight showed no material change. Curvature of the spine was found in 264 boys and 252 girls, and among these were 226 boys and 189 girls who had suffered from rickets in early youth. The report contains other items of interest, but the foregoing may suffice to

prove how beneficial the introduction of medical inspection is to all concerned.

A consular report from Frankfort gives the following brief account of a step in advance by the city council of Erlangen:

The common council of Erlangen made an arrangement with the management of the medical clinic of the university that it should, for the present, assume the functions of school physician. All the pupils of the public schools undergo medical examination, except where a certificate of the family physician is produced. The parents or guardians are at once notified of the result of the examination, so that they may place their children under medical treatment if necessary. The school physicians themselves are not to treat them. For every pupil a health record is kept, which is filled out regularly during the entire course of tuition. In every school a weekly consultation takes place, at which pupils who are suffering from maladies or physical disturbances of any kind are required to be present. With the management of the university eye and ear clinic similar arrangements are made.

An important feature of all German school hygiene institutions is the keeping of regular records, which are continued throughout the course as methodically as are the term records of progress in the branches of study and of the students' deportment.

TAKING CARE OF CHILDREN'S TEETH IN SCHOOL.

The city of Strassburg is the pioneer in taking care of children's teeth during school age and teaching the children how to preserve their teeth. In six years as many as 27,801 children were treated by school dentists of that city. The following figures show the extent of the service rendered and the costs:

Years	Number of fillings.	Number of extractions.	Cost.
1902.....	699	2,912	\$547. 40
1903.....	4,832	6,530	644. 50
1904.....	7,065	7,985	1,292. 34
1905.....	8,340	8,552	1,594. 60
1906.....	7,476	7,134	2,034. 90
Total.....	28,412	33,113	6,113. 74

The expenses of the dental service in Strassburg, as is obvious, amounted to so little that the introduction of regular dental service in schools can not be opposed on that account. For the year 1908 the city school authorities appropriated \$2,380 (10,000 marks), which is a little less than 25 cents for each registered pupil.

In the city of Darmstadt an investigation proved that only one in every hundred children had faultless teeth. It was estimated in

Frankfort on the Main that an expenditure of \$7,500 annually would provide ample clinical aid, including treatment of the teeth of all the children attending the public schools of that city. In Freiburg, Baden, up to the end of 1907, on thirty-seven different days in which dental examinations were made, 2,478 children were treated. The number of extractions was 3,689; fillings, 1,231; new teeth put in, 102; and roots treated, 65. The number of extractions must gradually decrease and the fillings increase before the real object of this dental clinic will have been attained. Of the children examined only 2 in every 1,000 had ever before been treated by a dentist.

YEARS OF SERVICE AND AGES OF ANNUITANTS IN GERMANY.

The *Pädagogische Zeitung* of Berlin (No. 3 of 1909) gives a review of the length of service and the ages of German teachers granted pensions, or dying during service. The statements are given for periods of ten years. For the last ten fiscal years the following averages are stated:

PER CENT OF TEACHERS' PENSIONS AWARDED DURING EACH TEN-YEAR PERIOD OF SERVICE.

	Years of service.					
	10 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 and over.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Men.....	1.1	4.2	6.9	25.9	59.0	2.9
Women.....	2.1	12.5	14.6	41.7	29.1	None.

PER CENT OF TEACHERS' DEATHS DURING EACH TEN-YEAR PERIOD OF SERVICE.

	Years of service.					
	10 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 and over.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Men.....	17.7	15.4	23.4	32.0	11.5	None.
Women.....	21.5	13.1	47.8	17.3	None.	None.

The average age of men teachers who were pensioned was 59 years 4 months, that of the women teachers was 53 years 5 months 22 days.

The average age of the men who died in service was 45 years 6 months 4 days, that of the women who died in service was 41 years 8 months 14 days.

THE AGES OF PRUSSIAN TEACHERS.

Governmental statistics for 1908 state the ages of teachers in elementary or common schools in Prussia to be as follows:

Years of age.	Number of teachers.	Per cent.
20 to 24.....	12,799	15.56
25 to 29.....	14,355	17.46
30 to 34.....	12,684	15.45
35 to 39.....	9,525	11.60
40 to 44.....	11,574	14.07
45 to 49.....	8,168	9.93
50 to 54.....	3,738	6.73
55 to 59.....	3,561	4.33
60 to 64.....	2,585	3.14
65 to 69.....	899	1.09
70 and over.....	328	.40

The per cent column does not give a total of 100, owing to the fact that some teachers of primary grades (about 0.24 per cent) are less than 20 years of age.

ILLITERACY IN EUROPE.

The third edition of the *Handwörterbuch für Staatswissenschaften* (1908) gives a statistical review of illiteracy in European countries. In every country (except in Great Britain and Ireland, where inability to sign the marriage register is taken as the measure of illiteracy), illiterates are counted among the army and navy recruits. The following facts are stated:

Number of illiterates in every 10,000 recruits in various European countries.

Countries.	Year.	Number of illiterates.	Year.	Number of illiterates.	Year.	Number of illiterates.
Germany.....	1880	157	1890	51	1907	2
Prussia.....	1873	458	1890	78	1907	2
Bavaria.....	1880	50	1890	2	1907	1
Saxony.....	1880	0	1890	1	1907	0
Alsace-Lorraine.....	1880	80	1890	9	1907	2
Austria.....	1881	3,890	1894	2,200	.....	.....
Hungary.....	1881	5,080	1888	2,590	1900	1,495
Russia.....	1885	7,342	1895	6,110	.....	.....
Finland.....	.....	.....	.....	.....	1899	480
Sweden.....	1879	50	1883	27	1901	8
Denmark.....	.....	.....	1881	36	1897	20
Great Britain.....	.....	.....	.....	.....	1904	a 300
France.....	1884	1,229	1896	518	1903	400
Netherlands.....	1885	1,050	1896	470	1904	210
Belgium.....	1883	1,538	1892	1,360	1904	833
Switzerland.....	1885	180	1896	35	1904	9
Italy.....	1884	4,722	1894	3,894	1903	3,072

a Number unable to sign the marriage register.

As a rule there are more illiterate women than men. In Germany, in every 10,000 couples signing the marriage contract there were in

the five years from 1881 to 1885, 362 men and 699 women illiterate; in the period 1892-1896 the number of men had decreased to 130, that of the women to 213; in the period 1901-1905 the numbers were 45 men and 73 women.

ILLITERACY AND INVENTIVENESS.

Professor Du Bois-Reymond, of Berlin, in his work on Inventions and Inventors, attempts to prove that inventive productivity in different countries depends upon social factors. Inventive productivity is, he claims, not a spontaneous expression of life, but is influenced to a very large degree by suggestions from without, especially by the environment. General education, density of population, transportation facilities, social organization, etc., determine this productivity, and hence it is explained that despite the participation of the working people in state affairs comparatively few patent applications come from laboring men. The following table is the result of an inquiry made in 1900:

Country.	Number of patent applications.	Number of applications to every 100,000 inhabitants.	Per cent of illiteracy.
England.....	15,300	37	3.7
United States.....	22,900	30	6.2
Germany.....	14,800	26	0.05
Belgium.....	1,390	21	10.1
France.....	7,020	18	4.6
Sweden.....	900	18	0.08
Italy.....	1,030	3	33.8

^a Of white population over 10 years of age (census of 1900).

One glance at the foregoing figures shows that race characteristics do not predetermine the inventive productivity of a country, nor does the high proportion of literates, but social factors, especially the high status of industry, do determine it. England, the United States, and Germany, the countries having the best developed systems of industry, are the most productive in inventions. Germany alone had, in 1900, 1,500 patent applications concerning technical contrivances relating to electricity.

THE EDUCATIONAL SITUATION IN HUNGARY.

In Hungary differences arising from friction between nationalities and from denominational religious friction retard the schools in their beneficent work. It is doubtless the case that these chaotic educational conditions in Hungary are the cause of the high per cent

of illiteracy found in that country. Hübner's Geographic Statistical Tables credit Hungary with 476 illiterates to every 1,000 inhabitants, according to the census of 1900, and with 149 illiterates to every 1,000 recruits.

The following facts and historical allusions are taken from *Allgemeine Deutsche Lehrerzeitung*, Leipzig:

An unprejudiced observer must admit that the Hungarian (or Magyaric) element in Transleithania (Hungary) has no easy position. According to the census of 1900, Hungary had 8,742,301 Hungarians or Magyars; 2,799,479 Roumanians; 2,135,181 Germans; 2,018,641 Slavonians; 1,678,569 Croatsians; 1,052,180 Servians; 429,447 Ruthenians, and 397,761 other elements; hence 8,742,301 Hungarians against 10,512,258 representatives of other nationalities. It would be folly to speak of Hungarian hegemony if each of the other elements formed a compact nationality or a state within a state.

The independent political existence of Hungary dates from the year 1867, when Cisleithania, the Austrian crown lands, were separated from Hungary to form a separate union, connected with Hungary only through the person of the Emperor, who is both Emperor of Austria and King of Hungary. After the independence of Hungary was constitutionally guaranteed, the Government aimed at making the people homogeneous, a difficult matter, since the to a certain degree antagonistic elements live in groups, one portion of the Kingdom being predominatingly Roumanian, another Servian, or Croatian, or Magyaric, or German, as the case may be. Nowhere were the Government's efforts at welding the population more successful than in southern Hungary, inhabited chiefly by Germans (Suabians). This part of the monarchy is called, not improperly, the "Hungarian Canaan," the promised land. The city of Temesvar, which used to be an exclusively German town, and still is inhabited chiefly by Germans, permitted its German theater to be closed for want of support. Communities which had but a small Magyaric representation in their councils allowed their German schools to be changed to Magyaric schools, without even being urged to do so by the Government.

But the situation has changed radically in recent years among the Germans, as well as among all the other nationalities, in southern and western Hungary. The national aspirations of the Poles, Bohemians, Italians, and other competent races of the Austrian Empire, have been copied by the various national fragments in Transleithania. The propaganda in favor of retaining their several languages, customs, etc., has had a surprising success. Schools which had been Magyarized are being changed by again employing teachers who use the mother tongue in school. Many parents prohibit the use of the

Hungarian language at home and on the playground. German theaters are opened. The village and city councils are using German, Roumanian, or other mother tongues as mediums of intercourse. Casinos, reading circles, agricultural societies, library clubs, and other gatherings are being organized, from which Hungarian periodicals and books are banished. Singing societies are called into life, in which never a Magyarie song or composition is heard.

Ever since the Poles in Galicia (Austria) and the Czechs in Bohemia and Moravia (Austria) succeeded in securing for themselves local autonomy, the Roumanians, Servians, Germans, Croats, Slavonians, and other nationalities in Hungary are imbued with the idea of preserving their national individualities, and it is difficult to foresee where the chaotic condition will end, or what will be the upshot of it for the Empire.

The Hungarian state educational system was regulated, as was that of all Austrian crown lands, up to 1848, by a law promulgated by Emperor-King Francis in 1805. This law was called "Ratio Educationis," the principles of which are still in force. At present there are five laws concerning the lower public schools: (1) The law of 1868, which deals with the internal management of the schools; (2) the law of 1876, which regulates the election of local school authorities; (3) the law of 1893, which determines the teachers' salaries of both communal and denominational schools; (4) the law of 1897, which deals with the state's participation in school expenditures, especially salaries; and (5) the law of 1908, which decrees the abolishment of tuition fees for elementary schools.

In 1907 the Hungarian legislature discussed an amendment to the law of 1897, which subsequently passed, dealing with the state's participation in school expenditures; but the bill nearly failed to pass, owing to the antipathy of the non-Magyaric nationalities, who opposed it, fearing that the Magyars would suppress their languages. The Hungarians emphatically state that it is not their object to suppress the various mother tongues of the other nationalities, but that they must insist that to the Magyarie language, as the official language of the country, a certain number of hours a day be devoted in every school, since in non-Magyaric communities the official language is frequently neglected. All the Hungarian Government wants is a proper representation of the national language in the curriculum, otherwise the state as such could not be called upon to aid in keeping the schools open.

Another cause for opposing the school legislation of the Government lies in the fact that the various religious denominations and their clergy suspect the Government of trying to injure them through the influence exerted upon the school children by state-subsidized teachers.

All these currents and counter currents the present minister of public instruction, Count Apponyi, has led into one channel by his success in having the law so interpreted that every school for which a community claims a state subsidy or grant must devote a part of the day to the study of Hungarian, the official language, while the mother tongue, or local language of the district, may be used for all the rest of the day.

Whether the Government's hope to supplant the languages of other nationalities will be realized does not, as experience in other countries has demonstrated, depend upon any money spent or withheld by the state, nor upon the greater or lower degree of local patriotism, but simply and solely upon the ease with which the one or the other language can be learned and spoken. The Saxon farmers in Siebenbürgen (in southeastern Hungary) have for over seven hundred years maintained their mother tongue, a German dialect, after having stripped it of all troublesome inflections and grammatical difficulties, as the Anglo-Saxons did with the language they took with them into Great Britain. The ease with which the English language can be used secured it the victory over Celtic, Latin, and Norman-French. Though it has absorbed innumerable words of Latin, French, and Greek origin, its structure is still Anglo-Saxon, and the uneducated use words of Anglo-Saxon origin almost exclusively. A similar victory was won in Siebenbürgen. Magyaric, on the other hand, is a language resembling the Latin in its rigidity of grammatical inflection and construction. Its difficult grammar will probably be its own bitterest enemy, not the clergy of this or that church, nor the local patriotism of the communities of Roumanian, Servian, German, Slavonian, Croatian, or Ruthenian extraction. Man is apt to use the tool that is handiest for use and most practicable for the work in hand, and likewise the language which requires least exertion in learning and using will win in the linguistic race in Hungary, as everywhere else.

ELEMENTARY SCHOOLS IN BUDAPEST.

The Hungarian ministry of education published recently a report of the statistical and historical development of the elementary school system of the capital of Hungary, which dealt with the period from 1871 to 1900, inclusive. The document was prepared by the noted Hungarian educator, Joseph von Körösis, and shows that the favorable economic development of the city during these thirty years is paralleled by the development of the schools. In 1871 there were for about 10,000 pupils only 32 schoolhouses, with 129 rooms for 146

grades. In most rooms more than 80 pupils were seated, in 4 rooms more than 100. Sanitary conditions of the schoolhouses were very defective; also teachers were lacking, for there were only 131 teachers for 146 grades or classes.

The worst feature of the system was the difference between the number of pupils enrolled and those in attendance, so that on an average every fifth child was obliged to repeat the course of an entire year—that is, was not promoted. Almost half of all the pupils were absent 1 to 5 per cent of the time; one-fifth, 5 to 10 per cent; one-seventh, 10 to 20 per cent; 332 children, 20 to 30 per cent; 96 children, 30 to 40 per cent; and 32 children, 40 to 50 per cent. These absences are explained by the want of consideration of the Hungarian school authorities for the non-Magyaric nationalities, with the result that 3,645 children of the city of other nationalities, being unable to understand the Hungarian language, were kept from school by their parents or played truant. (See also p. 480.)

All these defects of the system have been remedied in the course of the years. The following table shows the results of improved school administration, and especially of greater tolerance shown to the non-Magyaric elements of the population, for rigid exclusiveness would hardly be advantageous to the education of the young in a city where, in a population of 703,448, there are 387,276 who speak German. The fact that between 35 and 50 per cent of the school children are older by one to five years than they should be, judged by the grades they are in, is noted in the report. The per cent of absence is still 15.

Year.	Schools.	Rooms.	Grades.	Teachers.	Pupils.	Pupils to one room.	Classes in every 10,000 population.	Pupils to one teacher.
1871-2.....	32	129	146	131	9,848	68.2	5.0	67.2
1880-81.....	77	379	414	384	24,171	59.6	11.2	58.8
1890-91.....	94	520	587	557	36,303	58.4	10.3	54.5
1900-1901.....	132	946	1,072	1,196	59,932	58.7	12.9	46.5

CONFERENCE OF TEACHERS OF CONTINUATION SCHOOLS.

The German Association of Continuation School Teachers held a meeting in Brunswick, October, 1908, which was unusually well attended. The various state governments of the Empire gave evidence of their interest in the proceedings by sending many delegates to the meeting to represent them. The proceedings consisted of academic discussions, during which it was clearly shown that the principles and nomenclature of the system of continuation schools are not as yet clearly defined. Doctor Stieda, of the University of Leipzig,

spoke about the possibility of developing German handicraft, and intimated that the great centralizing changes in the economic and business life of Germany tended to destroy the small shops; hence, that the artisan had to face the possibility of being superseded by the factory "hand." Still, he believed that by equipping the home-worker or small shopworker better than heretofore, the skilled laborer could be enabled to cope with modern factory work, by making him inventive and encouraging him to evolve new ideas, new forms, and new methods. He deprecated the system of shop apprenticeship, and would substitute for it, or at least combine with it, school instruction in trade technology.

The proposition of the speaker was discussed with much animation, especially his suggestion that the so-called guild schools might be abandoned in favor of government schools.

Rural continuation schools, in which the technical part of instruction consists of agriculture, horticulture, floriculture, pomology, forestry, and stock raising, were discussed in a paper by Mr. Herbst, of Calvörde. His resolutions, culminating in an appeal to the people for a further extension and improvement of the system of rural continuation schools now in existence, were adopted unanimously.

Also, the trade or industrial school system was discussed with regard to its better organization. The chief emphasis during the discussion was laid upon the necessity of uniform definitions and nomenclature of the various schools. It was admitted generally that during the first period of existence of the continuation school system, such schools mostly kept open in the evening, and had been merely educational "repair shops," but that during the last two decades they had properly assumed the character of vocational schools, serving distinct purposes, such as preparing skilled labor for shop trades, factories, industrial arts, etc., but especially serving shop apprentices, since mathematics and bookkeeping, drawing and sketching, geography and history, language and composition, are now taught with particular reference to the apprentice's occupation.

Privy Councilor Doctor von Seefeld, who represented the Prussian minister of commerce and industry, deprecated any minute definition and classification of the numerous vocational continuation schools, intimating that such uniformity would lead to mechanical drill, while the greatest merit of the entire system of special schools lay in the fact of its not being a system. The wonderful variety of vocational schools offered a possibility of adapting the schools to local needs, or to the industrial peculiarities of the localities in which they are situated. The whole subject of classification and of a more definite organization of the system was referred to a committee for a future report.

THREE SYSTEMS OF CONTINUATION SCHOOLS IN PRUSSIA.

The independent Prussian continuation or supplementary school is essentially a creation of the twentieth century. Independent, because it is not an integral part of the system of elementary or common schools, though it builds upon their results. Formerly it was no more and no less than an educational repair shop, and as such the stepchild of public opinion and school administration. Since it has been separated from the elementary schools and made an independent institution its development has proceeded on new lines, so that to-day it has hardly a feature of the old continuation school except its name. A beneficent fate has removed it from too strict bureaucratic regulations. The strong, open-hearted initiative of the authorities has understood how to awaken latent germs in it, and to-day state and communities, teachers, merchants, and artisans, compete in building up systems of continuation schools worthy the name.

The administrative reports of the royal Prussian industrial office, and the last volume of the Prussian Statistical Yearbook, give exact information concerning the progress of the systems of continuation schools, which goes into details too minute to reproduce. The Imperial Labor Gazette (published by the imperial statistical bureau) has in its March number of 1909 (pp. 215-220) an article which contains valuable and rare information on the present status of the continuation schools of Prussia. In order not to create confusion in the mind of the reader, it may be stated that the schools mentioned here are not trade, or monotekhnical, schools, though they are to some extent vocational. The real trade, or vocational, schools of Prussia are mentioned in the Annual Report of the Commissioner of Education of 1908 (pp. 267-275), where also a number of courses of study of such schools are sketched.

The three systems, known as (1) industrial continuation schools, (2) commercial continuation schools, and (3) agricultural continuation schools, are sketched in the article in the Imperial Labor Gazette referred to, which appeared also in the Statistical Supplement of the *Berlin Pädagogische Zeitung*.

I.—INDUSTRIAL CONTINUATION SCHOOLS.

The first comprehensive statistics of these schools in Prussia were published in 1874. According to that publication there were only 435 such institutions, 43 of them in the province of Hanover, 50 in the county of Wiesbaden, 15 in the county of Cassel, and 23 in the province of Schleswig-Holstein. In 176 of such schools attendance was compulsory. During the same year the state legislature (the diet) appropriated 142,140 marks (\$33,750) for their maintenance. Up to that year subsidies had been given only by the department of industry and public works. For a number of years following, statis-

tical information is lacking. During the last five years the growth of the system of industrial continuation schools for boys has been as follows:

Year.	Schools.		Total.	Students.		Total.
	With compulsory attendance.	Without compulsory attendance.		With compulsory attendance.	Without compulsory attendance.	
1904.....	1,183	107	1,290	174,494	27,222	201,716
1905.....	1,301	94	1,395	202,669	23,903	226,574
1906.....	1,450	85	1,535	240,951	20,390	261,341
1907.....	1,505	74	1,579	261,839	18,588	280,427

Besides these schools, there are in larger cities industrial schools for girls. Exact statistics concerning their attendance are not available. In the foregoing table it is noticeable that the schools with obligatory attendance increase, while those with voluntary attendance decrease. The opponents of local obligatory attendance can not derive much comfort from the figures presented. The rapid development of compulsory attendance brushes contrary arguments aside, and compulsion is victorious, even before a state law decrees it. The expense necessary to carry the local laws of compulsory attendance into effect can not be an obstacle, for everyone is convinced of the necessity of a better education of industrial laborers, so that both State and communities are ready to make large appropriations for that purpose. Those of the State have increased 100 per cent since 1901, to wit:

Year.	Marks.	Year.	Marks.
1901.....	918,534	1904.....	1,405,712
1902.....	1,049,849	1905.....	1,589,180
1903.....	1,147,333	1906.....	1,890,923

The communities are obliged to offer free the required buildings or rooms, including light and heat. After deducting the tuition fees from the amount necessary for the support of the school, the State supplies, according to the financial capacity of the community, from one-fourth to three-fourths of the remaining expenses. Usually there are other sources of support besides those derived from tuition, local taxation, and the state treasury. Thus, for instance, the total amount needed for the support of industrial continuation schools in the two provinces, Rhineland and Westphalia, in 1905-6 (77 schools with 44,628 students and 1,155,858 marks expenses), was derived from the following sources:

	Marks.
Cities and small communities.....	579,502
State treasury (appropriation).....	347,528
Counties and provinces.....	4,395

	Marks.
Chambers of commerce	337
Boards of trade	150
Guilds and journeymen's clubs	1,871
Mercantile and welfare societies	8,160
Tuition fees	197,352
Endowments (interest)	13,076

II.—COMMERCIAL CONTINUATION SCHOOLS.

The growth of the commercial continuation school system in its early stages was bound up with that of the industrial continuation school system, and even to-day it is not everywhere clearly separated from the latter. Since 1904 the following statistics are published:

Year.	Schools.		Students.				
	With compulsory attendance.	Without compulsory attendance.	Under compul- sion.		Without compul- sion.		Total.
			Boys.	Girls.	Boys.	Girls.	
1904.....	221	69	(22,603)		(9,067)		31,670
1905.....	254	62	27,181	927	7,208	1,618	36,934
1906.....	276	58	29,954	1,240	6,655	1,982	39,831
1907.....	299	58	34,179	1,842	5,811	1,752	43,584

The commercial continuation schools are not as numerous nor as large as the schools for artisans. The 1,579 industrial schools with their 280,427 students outnumber the 357 commercial schools with their 43,584 students. The view that business clerks, more than any other wage-earners, need a thorough and continuous education, is not held generally. The means of support for these schools are derived differently from those of industrial schools. Communities and chambers of commerce chiefly support commercial schools, and since the tuition fees are not insignificant (15 to 30 marks, or \$3.37 to \$7.14, a month), these schools, to a large extent, support themselves. The part of the expenses not covered by tuition fees is defrayed equally by communities, State, and chambers of commerce. In the cities of Oppeln and Halberstadt special agreements are made with the state authorities. Other chambers, as for instance that of Berlin, maintain schools without state subsidies.

The state subsidies for commercial continuation schools were as follows:

Year.	Marks.	Year.	Marks.
1901	71,739	1904	92,440
1902	72,125	1905	120,921
1903	75,381	1906	139,127

To what degree others contributed to the total expenditure for commercial continuation schools may again be shown by the example of the two western provinces, Rhineland and Westphalia, which maintain 41 of such schools, with 7,763 students, at a total cost of 288,372 marks. The contributions from the various sources were as follows:

	Marks.
Cities	53, 805
State	33, 989
Counties and provinces	1, 720
Chambers of commerce	18, 792
Societies for welfare	6, 900
Tuition fees	171, 193
Endowments (interest)	4, 632

III.—RURAL CONTINUATION SCHOOLS.

The organization of rural continuation schools was for the first time uniformly regulated by a joint order issued by the ministers of the interior department, the department of public instruction, and the department of agriculture February 2, 1876. Before that date such schools had been established and maintained by voluntary efforts in several provinces, and everywhere, but especially in the county (governmental district) of Wiesbaden, they had proved beneficial. That one county had, in the winter of 1874-75, already 91 rural continuation schools, with 1,570 students. Of these students, 1,450 were between 14 and 20 years of age, 108 between 21 and 30, and 12 between 31 and 40.

The development of the rural continuation schools in Prussia is plainly seen from the following table:

Growth of Prussian rural continuation schools.

Year.	Schools without vocational instruction.			Schools with vocational instruction.		
	Number of schools.	Number of students.	Total expenditure in marks.	Number of schools.	Number of students.	Total expenditure in marks.
1882.....	559	9,288				
1886.....	338	5,768				
1887.....	549	7,807				
1888.....	546	8,212				
1889.....	633	9,756				
1890.....	727	11,144				
1896-97.....	875	13,317	91,808			
1897-98.....	969	14,059	100,804	6	80	1,754
1898-99.....	1,041	14,563	112,740	38	606	12,973
1899.....	1,046	14,823	128,067	33	469	11,589
1900.....	1,139	16,225	144,777	22	332	8,119
1901.....	1,281	18,854	162,879	6	112	1,465
1902.....	1,421	20,666	182,236	6	89	1,165
1903.....	1,664	23,026	220,944	6	118	1,267
1904.....	2,010	28,333	281,024	6	84	1,235
1905.....	2,617	37,445	384,706	6	100	1,412
1906.....	2,991	42,607	432,553	7	84	1,557
1907.....	3,477	50,858	532,932	8	161	1,800

During the decade 1898-1907, the number of agricultural continuation schools newly established was 2,511; the number of students increased 36,880, and the expenditures 432,154 marks, during the same period. In what proportion the different provinces of Prussia have progressed in late years in maintaining such schools is seen from the following table:

Prussian rural continuation schools.

Province.	Number of schools.		Number of students.	
	1902.	1907.	1902.	1907.
East Prussia.....	86	474	980	4,366
West Prussia.....	36	98	433	954
Brandenburg.....		174		1,864
Pomerania.....	25	102	385	930
Posen.....	42	272	425	3,024
Silesia.....	77	336	1,716	7,018
Saxony.....	53	113	672	1,731
Schleswig-Holstein.....	150	212	1,270	1,832
Hanover.....	282	452	4,081	6,375
Westphalia.....	107	230	2,030	3,861
Hesse-Nassau.....	280	657	3,883	12,687
Rhineland.....	236	304	4,345	5,678
Hohenzollern.....	53	53	535	538

The province of Hesse-Nassau, provides best for the education of its rural youth. Hanover, too, stands well in the foregoing list. In Posen, Brandenburg, Silesia, and East Prussia some progress has been made, while in West Prussia, Pomerania, and Saxony comparatively little improvement is noticeable. In most cases the founders of rural continuation schools are the communities and the school districts. The means of support are derived chiefly from state subsidies, partly also from counties and rural communities. The total expenditure for such schools was raised from:

	In 1902.	In 1907.
	Marks.	Marks.
Tuition fees.....	12,245	28,647
Endowments, gifts, and bequests.....	18,928	31,441
Agricultural societies.....	697	3,144
Communities.....	28,232	66,542
Counties.....	26,365	54,767
Provinces.....	4,247	7,787
State subsidies.....	91,522	340,604
Total.....	181,236	532,932

There are marked differences in the manner of raising the funds in the different provinces. The Prussian Yearbook of 1908 publishes the following itemized table for 1906, showing from what sources funds for rural continuation schools were received:

Sources of support of Prussian rural continuation schools.

Province.	Tuition fees.	Endowments, gifts, and bequests.	Agricultural societies.	Communities.	Counties.	Provinces.	State subsidies.	Total.
East Prussia.....	169	886	448	526	1,724	.....	56,825	60,578
West Prussia.....	.....	.....	.....	86	437	.....	12,311	12,834
Brandenburg.....	3,446	2,915	90	1,377	1,897	405	9,612	19,742
Pomerania.....	344	386	77	1,818	1,855	.....	7,417	11,897
Posen.....	18	.....	37	370	60	.....	25,992	26,477
Silesia.....	42	1,027	158	1,629	2,083	.....	34,336	39,305
Saxony.....	242	54	.....	1,417	3,199	.....	4,400	9,312
Schleswig-Holstein.....	2,152	1,037	228	1,574	3,377	290	25,202	33,860
Hanover.....	10,775	1,286	247	8,105	9,670	.....	25,399	55,482
Westphalia.....	3,706	203	305	11,394	7,792	.....	14,499	37,899
Hesse-Nassau.....	1,378	3,251	20	19,814	11,729	6,000	35,235	77,427
Rhineland.....	656	15,377	102	8,147	3,630	.....	14,049	41,961
Hobenzollern.....	.....	.....	.....	2,582	.....	.....	4,754	7,336
The State.....	22,928	26,422	1,712	58,839	47,453	6,695	270,061	434,110

RURAL HIGH SCHOOLS IN DENMARK.

Since many European authorities, in their efforts in behalf of university extension among the rural population, have taken the Danish people's high schools as models, it is well to see what is done in the Kingdom of Denmark in this direction. In No. 11 of the Documents of Progress, Mr. Holger Begtrup, of Copenhagen, states that these institutions have become the most important factors of the intellectual and economic development of the rural population, inasmuch as they have raised the culture of the farmers quite beyond the hopes of the founders of the first of them. The first people's high school was established in Rödning (North Schleswig) in 1844. Later, in 1870, Christian Kold established one on the island of Tünen, which became the model for many others. The students not only studied together in class, but lived in the institution. Dormitories are now connected with all these institutions. Though they are called "Folkehoiskole" (literally people's high schools), the word "Folke," or "people," should by rights be replaced by "rural," for the word "people" is used in contradistinction to city population. If a high school is established and maintained by the people of a city, it would not be called a "people's" but a "city" high school. The people, in the Danish conception of the term, are those who live outside of cities.

At present (in 1908) there are 70 such rural high schools with over 7,000 students. Most of them receive state subsidies. In 1906 as many as 3,493 young men and 3,196 young women were enrolled in such subsidized schools. Two-thirds of the students range in age between 18 and 25, one-third are older. The course for the young men begins November 1 and ends April 1; the course for young women begins May 1 and ends August 1. The branches taught are

as follows: Oral and written use of the mother tongue; history of Denmark and other countries, with the necessary geography and popular natural science. There is no instruction in agriculture. The tuition fees per month amount to 35 crowns (\$17.05), which includes board and lodging. Many students (in 1907 there were 2,551) receive scholarships of 25 crowns (\$12.18) a month. The students come from rural homes; they are mostly sons and daughters of small leaseholders, farmers, and artisans. Of the total number of students (about 7,000), there were 395 who had their homes in cities.

One important feature of these schools is that they are not considered part and parcel of the State's system of popular education, hence the state government has nothing to do with their management and supervision. It leaves them alone, except that each of these high schools receives, on an average, something like 3,000 crowns a year from the Government as a subsidy. This freedom from governmental interference allows these schools to adapt themselves to the needs of localities as well as to the educational preparation of their students. Procrustean courses of study, or requirements of admission, are not found in these schools. The students of these rural high schools have a popular university at Askov to look forward to, where a two-year course of thorough scientific study and foreign languages is offered.

The influence of the Danish rural high schools upon the civilization and culture of the country is undeniable. In the Danish Parliament at Copenhagen sit many deputies who have received no higher education than is offered in these rural high schools; even one of the members of the King's cabinet is a graduate of a "people's" high school.

The Danes who came to the United States have, true to the traditions of their native country, established 13 people's high schools, after the models in Denmark, namely, in the States of Nebraska, Minnesota, Iowa, Wisconsin, Illinois, and Michigan.

Sweden and Norway have also followed the example of Denmark. Sweden has 39 people's high and 24 agricultural high schools. The number of such schools in Norway is not stated, but the number of students is 634.

Finland also has established 26 such schools, having 1,223 students.

GRADUATES OF SECONDARY SCHOOLS IN GERMANY.

The ten universities of Prussia received in 1908 from the three kinds of secondary schools 27,457 native students. Foreign students are excluded from the following computation, they not having received their preparation in German secondary schools. It is in-

structive to see what proportion of these 27,457 freshmen came from the Gymnasia or classical high schools, in which Latin, Greek, and a modern tongue are taught; how many came from Realgymnasia, schools in which Latin and two modern languages are taught; and lastly, how many came from Oberrealschulen, in which neither Latin nor Greek, but two modern languages, are taught and which devote much time to mathematics and natural sciences.

The following table gives the actual figures for each university faculty and the totals in numbers and percentages. These percentages would not be materially different if the new students of polytechnic institutes and other seats of higher education were included, for the classical high schools, the Gymnasia, have a remarkably strong hold on the people. The schools without Latin (*Lateinlose höhere Schulen*), such as *Realschulen*, *Bürgerschulen*, and *Mittelschulen*, prepare their students chiefly for commercial and industrial pursuits. Their increase is truly phenomenal and can well be compared with the astonishing increase in public high schools in this country during the last twenty or thirty years.

Number of graduates from each class of secondary schools in the different Prussian university faculties.

Faculty.	Total.	Graduates of—		
		Gymnasia.	Real-gymnasia.	Oberreal-schulen.
A. Theology.....	2,106	2,106		
B. Law.....	5,441	4,569	642	230
C. Medicine.....	2,786	2,379	320	87
D. Philosophy.....	8,612	6,085	1,439	1,088
(1) Philosophy.....	213	180	24	9
(2) Classical philology.....	3,295	3,029	174	92
(3) Modern philology.....	1,466	645	505	316
(4) History and archæology.....	618	541	51	26
(5) Mathematics and natural sciences.....	2,328	1,213	535	580
(6) Other subjects.....	692	477	150	65
Total.....	27,457	21,124	3,840	2,493
Per cent of total.....	100	77	14	9

In eight non-Prussian universities the proportions were about the same. Thus out of a total of 31,622 students in 18 out of 21 German universities (Munich, Erlangen, and Würzburg not reporting) 24,876, or 78.5 per cent, were graduates of classical high schools, 4,417, or 14 per cent, of semiclassical high schools, and 7.5 per cent of scientific high schools.

COST OF SECONDARY SCHOOLS IN GERMANY.

The per capita cost of secondary education in Germany is very much greater than that of elementary education, as it is in every country; but it is difficult to give a detailed statement of the cost for

the whole country, or even for the separate States, because secondary schools in Germany are not a part of the general scheme of school administration, being supported in part by ancient endowments and by tuition fees; while many receive state subsidies, others are royal schools, and still others are municipal schools, to which the State pays no contribution at all, though all secondary schools of whatever nature, whether classical, semiclassical, modern, or scientific, and whatever their sources of support may be, are subject to the State's supervision and regulation.

On the other hand, the elementary schools being gratuitous since 1888, the sources of their support are so well known through the annual state and city appropriations that there is little difficulty in comparing their cost with that in other countries.

Recently the Prussian city of Frankfort on the Main offered an opportunity for comparing the cost of secondary schools, which may be used as an example, for the conditions prevailing there are similar to those in other large cities of the Empire. In 1907-8 the secondary schools for boys—that is, the classical, semiclassical, and scientific schools in Frankfort—cost \$70.20 per capita of the students. If the state subsidy be added, the per capita is \$98.33. The cost of secondary schools for girls amounted to \$44.49 per capita, or, with the State's contribution, \$77.65. The per capita for middle or intermediate schools is less, namely, \$30.47, or, including the State's contribution, \$40.83. The per capita for elementary schools is \$20.25, or, including the State's contribution, \$26.66.

From this it is plainly seen that a pupil of the boys' secondary school, counting only the expenditures derived from local sources, costs almost three and a half times as much as a pupil of the elementary (Volks) schools, and that in a comparison with the other types of schools the elementary does not make a much better showing. The customary ratio seems to be 1 to 3, or $3\frac{1}{2}$. It does not require much penetration to see that the per capita of elementary schools need not be as high as that of secondary schools, but German elementary teachers express the opinion that more should be spent upon appliances for teaching, free books, school libraries, laboratories, workbenches, cooking utensils, drawing appliances, and suitable rooms for the so-called "supplementary branches of study."

The laboratory appliances needed for secondary schools are necessarily more expensive than for elementary schools; so are the collections of natural objects, the text-books, and the school libraries. There does not seem to be too great a difference between the expenditures of Gymnasia and those of primary schools, if the fact be considered that the former are the colleges of Germany, and a college education is proverbially costly. Another difference, namely, the one between boys' Gymnasia (\$70.20) and girls' high schools

(\$44.49), though perhaps characteristic of the valuation set upon higher education of girls in Germany, is not likely to be found in this country.

NEW AGENCIES OF HIGHER EDUCATION IN GERMANY.

THE HAMBURG COLONIAL INSTITUTE.

Hamburg, the wealthy Hanse town and a German State, maintained for many years a number of lecture courses for advanced students. For over ten years the question was agitated whether it would not be best to establish a university in Hamburg, and if so, whether the institution should be a commercial university like the one in Cologne, or a university of the old type, of which the Empire has 21. The government of the State of Hamburg finally decided to introduce a new type of school, a colonial institute, which could prepare young men for colonial service, and at the same time aid the overseas business interests of the famous old center of foreign commerce.

This institute was opened at the close of the year 1908 with 36 students. It is to be a university for planters, merchants, and officials who intend to go to the colonies, and also a point where scientific and colonial endeavors can concentrate. In preparing young men for life in the colonies, the institution will not only impart knowledge, but will also be instrumental in infusing a spirit of self-dependence into the would-be colonists and settlers, from which, it is hoped, much benefit and advantage will ultimately accrue to the mother country. The programme of the institute contains the following announcement:

The curriculum is based on the idea that immediate and practical advantage must not be aimed at, so much as free theoretic interest in all that tends toward the progress of science, experience having taught that scientific work is ultimately serviceable and beneficial to practical life. The course of study includes law, political economy, philology, history, geography, medicine, and the natural sciences, but in all cases adapted to the special needs of the colonies.

The lectures on colonial politics and on profit-sharing colonial plants will be supplemented by excursions to warehouses and factories where colonial produce is prepared for the European market, so that the lecturer can demonstrate, with the entire process before him, how the raw material is treated and the place of the product in the commercial world. Geography and geology will be taught side by side, and the lectures will be illustrated in the course of excursions to different parts of Germany where diversified geological formations and the methods of adapting them to cultivation can be observed.

An additional course of lectures will be devoted to an explanation of the best manner of preparing food in the Tropics, and the students will be trained to give first aid in cases of accidents and ordinary tropical complaints. The elements of veterinary surgery will be taught, and in view of the advance of

Oriental semicivilization, which appeals to the natives more strongly than does European civilization, a course of lectures on Islamism will be delivered.

The administration of the new colonial institute will be in the hands of a council of professors, of which Doctor Thulenius is president, but in order to keep theory in constant touch with practice, the council will be augmented by three merchants, at present engaged in colonial trade. Doctor Stuhlmann, who has lived in German East Africa for many years, is the secretary of the institute.

LECTURE COURSES AT MANNHEIM.

In Mannheim on the Rhine the customary courses of lectures for advanced students, which eventually will crystallize into a university, as similar attempts did in Frankfort, Cologne, and Hamburg, have been greatly augmented for the winter semester of 1908-9. The programme contained 50 professional courses by 28 professors. New branches have been added to the departments of political economy, namely: History of economics, statistics, state and city debts, and insurance. Also, lecture courses on social policy, women's factory labor, oceanic and river navigation, problems of banking and exchange legislation, as well as tariff legislation. In the department of law, lectures on bankruptcy and mortgages, as well as on commercial and industrial contracts, have been added. The city authorities hope to obtain substantial additions to the funds already secured so as to build an institution which will serve the purpose contemplated.

The whole course consists of four semesters. The admission or matriculation fee is \$4.76, and an additional fee of \$28.56 for each semester. All fees are about 50 per cent higher for foreign students who wish to attend. Cards for attendance at lecture courses may be procured for \$1.19 for courses having lectures one hour a week, \$2.14 for two hours a week, \$2.85 for three hours, \$3.57 for four hours, and \$4.76 for five hours. Reductions are made to members of unions in Mannheim and vicinity. The students have the privilege of attending lectures at the University of Heidelberg, which can be reached by train in twenty minutes.

A UNIVERSITY CONTEMPLATED FOR POSEN.

The old universities in Germany, 21 in number, are likely to have a new sister institution in the near future. The Prussian province of Posen, formerly a part of Poland, and still inhabited chiefly by Poles, though the Germans have made great progress in the possession of the land and of city property, has not as yet a university in a population of 1,986,637 (census of 1905); but it has the nucleus of a university in its Academy of Scientific Study in the city of Posen. The Prussian government would long ago have raised this institution, which has already 1,000 students and 30 professors, to a full-fledged university of four faculties, if it had not entertained the apprehension that such an institution would become the center of Polish

political agitation. At least, this is the argument advanced openly in the Prussian legislature.

OTHER NEW INSTITUTIONS.

The former 9 polytechnica of the Empire have been increased to 10 by the establishment of a technological university at Danzig at the mouth of the Vistula (Weichsel), the chief object of which is the preparation of shipbuilders and marine engineers. Among the higher institutions of learning, the commercial universities, of which there were 5 in 1909, will increase their number in the near future. Mannheim on the Rhine, a great commercial center, and Solingen, the German center of the cutlery industry, are making great efforts toward founding such schools.

RESOLUTIONS OF GERMAN UNIVERSITY PROFESSORS.

The German University Teachers' Congress, which met in Jena at the close of 1908, passed resolutions which are remarkably frank, and which are dictated by a spirit of independence quite in accord with the principle of "Lehrfreiheit und Lernfreiheit," which has been a characteristic of German higher education ever since the time of William von Humboldt, who, at the beginning of the nineteenth century, was the first minister of public instruction in Prussia. The resolutions are as follows:

I. Scientific investigation and the transmission of its results must, according to their purpose, be independent of any consideration not inherent in their own scientific method—hence independent especially of tradition and prejudices of the people, independent of governmental authorities and social groups, as well as independent of monetary or other interests.

II. This demand lies as much in the interests of the state as in those of science, because the increase and spread of knowledge can never injure society, but will always promote its best interests.

III. This absolute independence needs no specific law to guarantee it, any more than other constitutional rights need special legislation for their protection.

IV. No limitation of the right to investigate and teach can be derived, directly or indirectly, from the official position of an investigator and teacher.

V. No exceptions whatever to these statements can be acknowledged concerning academic teachers of theology.

VI. Conditions coupled with ancient endowments, if they conflict with the liberty to investigate and teach, can not limit the right defined in the foregoing statement, because such conditions have become invalid by the law of custom. Furthermore, because all existing German universities have become state institutions, whose maintenance would be utterly impossible if dependent alone upon ancient endowments, their public character may not be limited by private purposes.

VII. From Paragraph II the danger of denominational universities, established and supervised by church authorities, is recognized, even though the course of study of such institutions be granted the same rights of independence which are inherent in state institutions.

These resolutions were adopted after a thorough and protracted discussion, in which it was repeatedly asserted that theological institutions that would not admit the fundamental prerogative of an academic teacher, i. e., the liberty of his conviction, could not claim equal rights with institutions which grant that prerogative without reserve.

PARTICIPATION OF THE GERMAN STATES IN UNIVERSITY ATTENDANCE.

The report of 1908 of the minister of public instruction of Prussia (vol. 204 of *Preussische Statistik*) gives a list of the 26 States comprising the German Empire, and their relative university attendance, as shown in the following table:

Number of university students in Germany to every 10,000 male inhabitants.

State.	1892-93.	1899-1900.	1905-6.
Prussia.....	9.51	10.47	12.04
Bavaria.....	12.95	12.43	14.43
Saxony.....	11.72	11.00	12.40
Wurttemberg.....	12.32	12.34	12.62
Baden.....	15.04	13.75	15.83
Hesse.....	14.71	15.69	18.84
Mecklenburg-Schwerin.....	13.12	12.72	15.98
Saxe-Weimar.....	13.17	14.66	14.73
Mecklenburg-Strelitz.....	12.09	15.92	10.59
Oldenburg.....	8.58	11.47	10.38
Brunswick.....	13.16	13.37	13.76
Saxe-Meiningen.....	10.10	9.51	10.15
Saxe-Altenburg.....	11.32	9.64	11.73
Saxe-Coburg-Gotha.....	11.33	10.55	10.66
Lubeck.....	13.61	13.18	16.18
Bremen.....	15.20	13.05	14.12
Hamburg.....	10.24	8.78	9.36
Alsace-Lorraine.....	6.07	9.49	11.04
Other German States.....	9.33	10.33	11.28
Average.....	10.55	11.06	12.67

These numbers reveal the fact that South Germany^a supplies a relatively greater number of students than Prussia and Saxony. This is notable because the south has many more small-shop industries and smaller farms than the north. The proportion of Prussia would be smaller still if Berlin, with its 22.66 students per 10,000 male inhabitants, were excluded. Of the 13 Prussian provinces, 9 remain below the Prussian average; the province of West Prussia, with the city of Dantzic, has only 7.38; Schleswig-Holstein, 8.30; Posen, 8.38; Pomerania, 9.28; east Prussia, with the city of Konigsberg, 9.86.

^a Bavaria, Baden, Wurttemberg, Alsace-Lorraine, and part of Hesse.

The chiefly agricultural districts of the north furnish few university students, while the agricultural districts of the south furnish many more than the Prussian average, and more than the average of the Empire. Grouping the numbers according to larger zones we arrive at the following results:

Among every 10,000 male inhabitants we find:

	1892-93.	1905-6.
First zone, east and north Germany.....	9.44	10.90
Second zone, middle and west Germany.....	10.26	12.63
Third zone, south Germany.....	12.30	14.25

It is to be remembered that Berlin, with its large attendance, is situated in the first zone.

Whether analogous results would be noticed if the attendance of technological institutes, agricultural colleges, mining academies, and other higher seats of learning were considered, can not be stated with certainty. The attendance at universities was alone considered, because it is in universities where the civil officers (nearly all professional men, clergymen, judges, state attorneys, physicians, health officers, mayors, and secondary teachers are in the State's service) receive their preparation. Another point is that Catholic States, like Bavaria and Baden, furnish more university students than Protestant States.

In a few years the relative attendance will be greatly changed, since Prussia has opened its universities to women. The results of the first matriculation of female students at the universities of Prussia are as follows: The total number admitted is 663, of whom 461 are from Prussia and 202 from other States. The university of Berlin matriculates 400, Göttingen 71, Bonn 69, Breslau 50, Marburg 27, Halle 22, Königsberg 17, Greifswald 5, and Kiel 2. Of the total number, 363 study philosophy, philology, and history; 134, medicine; 108, mathematics and natural science; 25, dentistry; 22, political economy; 6, law; 3, evangelical theology, and 2, pharmacy. The German technological institutes had, in the winter of 1908-9, 1,230 matriculated women students.

Of the female university students from non-German States, 43 are from America, 35 from Russia, 14 from Austria-Hungary, 7 from England, 6 from France, 4 from Roumania, 3 from Switzerland, 2 from Italy, 1 each from Denmark, Holland, Norway, Servia, and Australia. In addition to these matriculated female students, there are 958 females enrolled in various lines of hospital work at the Prussian universities.

CHAIRS OF PEDAGOGY IN GERMAN UNIVERSITIES.

Doctor von Wehner, minister of public instruction in Bavaria, recently replied to a parliamentary inquiry concerning the establishment of separate chairs of pedagogy in Bavarian universities, as follows:

In 1907 the Royal Government submitted to the senates of the three Bavarian universities the question whether it was advisable not only to establish separate chairs of pedagogy, but also to connect practice schools with them. Comprehensive replies, with arguments pro or con, it was intimated, would be welcome. The reports of the three universities (Munich, Würzburg, and Erlangen) were received in due time by the Government. The senates of Munich and Würzburg declared themselves opposed to separate pedagogic chairs, and the senate of Erlangen advised the establishment of a new chair of philosophy, the especial duty of which it might be made to treat pedagogy. The introduction of practice schools into the universities was rejected by all three senates.

The arguments of the university senates of Munich and Würzburg against the establishment of professorships of pedagogy were as follows:

I. Pedagogy as an isolated science is incapable of producing creative scientific works.

II. Pedagogy as a university discipline would presuppose universal knowledge in its representative. Since that is impossible, it would be necessary for every university to arrange for an entire pedagogical faculty, analogous to the faculties of theology, law, medicine, and philosophy. Only thus could the special didactics of each branch of study be represented.

III. An introduction into the psychological foundations of pedagogy can take place only through a representative of systematic philosophy who is familiar with the method of experimental psychology.

IV. For theoretical pedagogical preparation of students of theology the present arrangements are quite sufficient.

V. The practical preparation of future secondary teachers properly belongs to the pedagogical seminaries connected with high schools, that of teachers of elementary schools to model classes in normal schools. The university, as such, has other objects in view; it has to promote the professional and purely human preparation of students.

VI. Connecting model or practice schools with the universities would raise objections concerning the principles upon which university education rests; it would also create great administrative difficulties relating to the teachers of such schools, their pupils, and local school conditions.

It is, therefore [concluded the minister], not considered necessary to establish separate chairs for pedagogy; all three senates raising objections to the plan, the Government is induced to dismiss the question for the present.

It may be added that in several leading universities, such as Berlin, Leipzig, Marburg, and Jena, pedagogy is represented by a number of chairs of philosophy, but a model school for experimental teaching is found only in Jena.

UNIVERSITY LIBRARIES IN PRUSSIA.

The Yearbook of the German University Libraries for 1909 reveals the relation between the number of volumes on the shelves and the number of volumes called for and taken home in 1908. The following table shows the facts for the ten Prussian universities:

Statistics of Prussian university libraries.

University.	Number of volumes in the loan library.	Number of order blanks filled out.	Per cent of volumes called for.
Berlin.....	208,350	116,144	55.7
Münster.....	164,824	54,092	32.8
Halle.....	255,600	59,127	23.1
Breslau.....	346,400	79,387	22.9
Greifswald.....	195,705	42,354	21.6
Bonn.....	325,000	67,025	20.6
Marburg.....	224,000	41,100	18.3
Göttingen.....	543,410	86,765	15.9
Königsberg.....	282,865	42,569	15.0
Kiel.....	272,572	20,018	7.3

CHAPTER XI.

SCHOOLS FOR CRIPPLED CHILDREN ABROAD.

By EVELYN MAY GOLDSMITH,

President of Association of Public School Teachers of Crippled Children in the City of New York.

In no department of education in Europe has greater progress been made during the last twenty-five years than in that which has to do with the physical, mental, and moral training of crippled children.

The greatest advance in the education of the deformed in connection with the regular system of public schools is to be seen in Great Britain, especially in London, Liverpool, Glasgow, and Edinburgh, where many public schools of a special character have been established for crippled children.

The greatest advance in trade schools for adults where crippled men and women are taught to earn their own living is found in Norway, Sweden, and Denmark. Here workshops have been established for over forty years, and within most recent times have been greatly enlarged and extended. These schools, which are in reality homes, are supported by grants from the Government and private donations, and while doing most effective work are often handicapped by need of funds.

DENMARK.

The mother school was first started in Copenhagen in 1872, and is still the only one in Denmark. From this many in other countries have been patterned. Large additions are now in process of construction, and in a year it will become an ideal educational center for the disabled of Denmark. In this school many trades are well developed, the aim of which is to fit the pupils to go out into the world and take positions that will render them self-supporting.

An attempt is being made to help the pupils to "learn to do things that pay," or, according to Miss Peterson, the head of the school, to teach them "to do their own living."

The institution has five divisions, namely:

I. *Clinic*, where patients are treated and bandages, wooden legs, special corsets, boots, etc., are supplied. These are made, at the order of the doctors in attendance, by the pupils in the workshops,

some of whom have become teachers and are now holding positions in other institutions.

II. *Workrooms*, (a) where bandagemaking, moldmaking, corset-making, saddlery, forging, and shoemaking are taught, the articles made being for the use of the cripples. Here are numbers of pupils without hands, wearing appliances which enable them to hold a tool and steady the material worked upon; (b) school of handicraft and manual work, consisting of wood carving, bookbinding, brushmaking, joinery, dressmaking, weaving, needlework, housekeeping, cooking, and office work. The age of the pupils varies from 14 to 26.

III. *A home*, where pupils from the country live during apprenticeship. Dinner is supplied to children from the city as well as those in residence. All the furniture of this home is made by the children, and is of most careful and exquisite workmanship.

IV. *Child's school*, where the rudimentary branches are taught. In addition, emphasis is laid upon the musical training, the singing being unusually fine.

V. *Recreation home*, at the seaside, for the most diseased patients, accommodating 44.

SWEDEN.

In Sweden industrial schools for adult cripples were established at Gothenburg and Karlskrona in 1885, at Helsingborg in 1887, and in Stockholm in 1892. In the city of Stockholm, though great care is taken of the health of children going to the public schools, yet their doors are not thrown open to crippled children. Special teachers are supplied by the public schools to teach these latter in their homes after school hours. A most careful supervision is exercised over the physical condition of the public-school pupils. If defects are observed, the teacher sends the child to the royal gymnasium, where curative gymnasium treatment is given free of charge to the poor. Though not having public schools for the crippled, Stockholm has two industrial schools for these unfortunates, supported solely by private contributions—one, the Society in Aid of the Deformed and Infirm, caring especially for adults, enabling them to provide for themselves as far as possible, and the other, the Eugenia Hemmet's, admitting both adults and children. The Society for the Deformed and Infirm admits pupils ranging in age from 9 to 57. In both institutions instruction is given free of cost, and the poorest pupils dine every day at the expense of the school. As soon as the work of the pupil is salable the school gives him payment for it.

Most remarkable is the dexterity attained by persons who have only one normal hand but two vigorous legs. Of such persons, a woman working at a sewing machine and a man at a turning lathe are able to gain as great dexterity and, when their apprenticeship is ended, to

earn as much money as bodily normal workers. A great variety is to be found in the objects made. Brushes of various kinds and furniture, such as tables, desks, chairs, etc., are made in large quantities. In the bookbinding division orders are taken for the binding of books, and in the shoe shop for the making of new shoes and the mending of old. In the girls' sewing room are made embroidered pillows, etc., and hand-woven towels, while machine work is done in dressmaking and knitting.

The Eugenia Hemmet's is one of the most ideal schools in the matter of situation and equipment in Europe. The rooms are most artistically decorated. Plants are everywhere in bloom, birds sing in cages, and beautiful pictures adorn the walls; when possible, the furniture in the class rooms is painted white.

The enrollment is 190. It is a noteworthy fact that no cripples are seen on the streets.

This community is divided into families, two or three nurses looking after each family. In this school the chief stress is laid upon giving to the pupil a good general education, rather than a training in the trades. One hundred of the children are divided into five classes, where they are instructed especially in English and arithmetic. In special Class I a girl with only a thumb writes beautifully. In Class II a boy of 15 has no legs, but does his work enthusiastically. A number of the children are in beds in the class room. In the kindergarten is a child 4 years old, born without arms, who can sew, paint, and cut as easily and correctly as a normal child. A band composed of 8 boys who have a teacher twice a week plays, leaning on crutches while they play.

The remaining 90 children are placed in different shops. In the tailor shops the clothing for the whole school is made, every child receiving two suits a year, one of them at Christmas time. Orders are taken for the knitting of stockings for the soldiers.

NORWAY.

Sophie's Minde, the large school for cripples in Norway, is in Christiania, situated on a hill overlooking the city. This school stands especially for manual training and shows that the most helpless cripples are capable of the finest handicraft. One girl lying in a wheeled bed works with her paralyzed hand and mouth in making lace with colored pins on a cushion. Another, who has lost her arms by amputation, makes a variety of exquisite laces, using her teeth alone, throwing the bobbins from side to side and occasionally with her teeth picking up an instrument to tighten the pattern when necessary. A man without fingers uses instruments in the palms of his hands, and carves most intricate designs in furniture.

GREAT BRITAIN.

In Great Britain the schools for crippled children are a recognized part of the system of public instruction.

These schools, it is important to note, are in buildings of their own, and are equipped with furniture and appliances especially adapted to the needs of the crippled child. A piano is in each room. Each school has an ambulance or two, constructed especially at great expense, to admit children on stretchers and in invalid chairs, and all children are conveyed to and from their homes. A nurse or a paid attendant accompanies each ambulance. When the ambulance arrives the children are given cod liver oil and medicines prescribed by their physicians, and at the morning recess crackers and milk.

The largest number of schools is in London; upon these the schools of other countries have been modeled; Glasgow, Edinburgh, and Liverpool are next in the lead.

Glasgow.—In Glasgow there are four well-developed schools, the Freeland, Bridgeton, Finnieston, and Hayfield schools. Here the plan is much alike—all in special buildings or old buildings remodeled to fit the needs of these children. The Hayfield school is especially ideal; for though it is a separate new building by itself, it is considered part of the big Hayfield School for Normal Children, which is a model building throughout—built somewhat on the style of our New York model buildings.

A typical time-table of the Glasgow schools is as follows:

A. M.

- 9.20– 9.55. Religious instruction.
- 9.55–10.10. Arithmetic (mental).
- 10.10–10.15. Register.
- 10.15–10.30. Arithmetic.
- 10.30–10.45. Cod liver oil and chemical food mixed, milk and crackers.
- 10.45–11.00. Geography.
- 11.00–12.00. English.
- 12.00– 1.00. Dinner and recess.

P. M.

- 1.00– 1.05. Register.
- 1.05– 2.00. Drawing, needlework, brush work, basketry, games.

All chairs and reclining sofas are fitted to the children, and thereby add to the children's comfort. Here also the aid society assists with the dinners.

Edinburgh.—The especially noticeable feature of the Edinburgh schools is the emphasis placed upon the surroundings of the schools. The playgrounds and gardens are beautifully arranged. The children have their own garden plats and care for their flowers and vegetables. This out-of-door work is considered very essential for crippled children.

Liverpool.—Next in importance to London as regards schools for cripples is Liverpool. The special schools, of which there are six, are carried on under the elementary education act of 1899, which empowers but does not require local authorities to provide for the instruction of physically and mentally defective children—children who by reason of mental or physical defect are incapable of receiving proper benefit from instruction in ordinary elementary schools, but are not incapable by reason of such defect of receiving benefit from instruction in special schools. Three of the schools, Dingel Lane, Whitefield Road, and Chatham Place, are “double” schools and provide for both physically and mentally defective children. Two, Frontenoy Street and Orwell Road, provide for mentally defective children only, and one, the West Kirby School, for physically defective children only. The schools are as follows:

I. The Whitefield Road School. Here are 102 physically and 55 mentally defective children. Manual work and the kindergarten are well developed. A midday meal is provided for each child, and the children are conveyed to and from school in ambulances, especially constructed at a cost of \$460 each. The premises are new and convenient, having been especially erected for the purpose. Here children are taken from 5 to 16 years of age. All classes are termed special classes. In this school much hand work of careful design is accomplished. In embroidery and work chipping the children draw their own designs. Water colors and stains are used on various white work, and marquetry work is much done on white wood—tables, frames, etc., being most popular. Hand machines are used in the making of clothing. Cookery and household work are studied, and shoe making and mending are made much of. Vocal music is a strong feature. The windows in this new building are arranged to drop entirely out of sight, as in a carriage, so as to admit much fresh air to the room. As Miss Williams, the head mistress, said, “More essential than medicine is fresh air.”

II. The Dingle Lane School registers 101 physically and 104 mentally defective children. Here again the manual training department and the kindergarten are noted as well developed.

III. The Chatham Place School, the largest of all, is composed of three dwelling houses converted into a special school—the cripples occupying the first floor and the mental defectives the floor above. A great point is made of nature study and gardening in this school. Children are taken between the ages of 5 and 16 and are divided into seven classes. All classes are called special classes from the lowest, Special A, up. Many original designs in basketry are worked out here, and again much chip work. The head mistress, Miss James, feels that toy making has a big future for the crippled child. Milli-

nery, also paper flowers and plasticine, a kind of clay work, are taught with good results.

IV. A small school at West Kirby for physically defective children, carried on by an educational committee in connection with the children's convalescent home, enrolls 33 pupils. The aid society pays half the price of the appliances, crutches, braces, etc., needed for the children.

London.—In London is found provision for the instruction and physical improvement of crippled children which is far in advance of that of any other country, and from that city New York has most to learn. For there overcrowded conditions are much as we find them in New York, with the inevitable accompaniment of physically and mentally defective children. In London both are taken care of, but the mentally and the physically defective are housed separately.

In 1886 there was formed an Invalid Children's Aid Society which made many experiments. Then Mrs. Humphrey Ward became interested and induced the London school board to take up a scheme in 1898 which she had worked out at the Passmore Edwards Settlement in Farvistock place. She had obtained the use of some good ground-floor rooms leading out into a beautiful garden with a nurse to superintend, and generously presented an ambulance to convey the 25 children to and from the settlement. As this was very successful, the board promptly put through a plan in February, 1899, providing the teacher and school furniture. Thus the first "Invalid Center," as it is called, was established. Since then, 23 centers, with over 1,880 children on the rolls, have been formed. Mrs. Ward's school has been the model upon which the other centers have been planned.

An india-rubber-tired ambulance, fitted with seats or with benches for the children brought on stretchers, starts on its round at 8.30. It is in charge of a nurse or a paid helper and the children are deposited at the school at 10 o'clock. This nurse superintends the children in the stage, examines them when ill, gives medicine prescribed by the doctors, gets on friendly terms with the mothers, and forms a valuable link between the home and the hospital. In addition, she orders the dinners and superintends the meal and recreation time, giving the teachers an hour and a half rest.

In making her experiment Mrs. Ward saw that no school could be successfully carried on without a hot midday meal for the pupils, and she organized the Crippled Children's Dinner Society to provide a hot dinner daily. A good hot dinner of meat, vegetables, bread, and pudding is provided for 2d. Sometimes this is varied by potato pie or vegetable soup, as the nurse thinks fit. The board

furnishes the kitchen, firing, and cook. The cook is responsible to the head teacher for the proper performance of her duties.

The dinners are under the care of the above-mentioned society, one representative manager being elected from each school. The managers meet monthly (I was fortunate enough to attend one meeting), accounts and menus are examined, and every case of inability to pay 2d. is carefully sifted. Free dinners are given only under exceptional circumstances, and it is a noteworthy fact that in the report of 1907 it is stated that only 4 per cent of free dinners were given, although these children come from the lowest and poorest slums of London.

The after training of these children is under the care of the same society that controls the dinners. As the child nears 16 (which is the special school age for leaving) his achievements are carefully noted and brought before the committee, and work suited as far as possible to the requirements of the particular child is found.

To these centers are sent children suffering from heart disease, paralysis, or overtaxed brains and nerves who can not stand the bustle of a large school. Occasionally children with very defective eyesight are admitted who are not blind enough to be taught in the "blind center."

These invalids' centers are under the care of Mrs. Burgwin, supervisor; Doctor Eichholz, medical inspector, and Dr. R. C. Elmslie, assistant medical inspector, whose work is practically indispensable. Doctor Elmslie has special record cards, and is making a great study of the problems encountered in the education of crippled children. I saw him examine the children of a school.

The head mistress and nurse of each school both keep special records as to a child's health. In a recent report Doctor Elmslie says: "Schools do not see sufficiently that efficient medical and surgical treatment is carried out and that the results are satisfactory." He estimates that 20 per cent of these children will earn their living at a trade later in life, 50 per cent more if work in which they are especially skilled can be found, while 30 per cent will be unable to support themselves.

In the Royal National Orthopædic Hospital, Great Portland street, and in the Alexandra Hip Hospital, where hip and special cases are admitted for very long periods, classes are formed under teachers of the London board schools. Thus these children do not retrograde mentally in spite of prolonged hospital treatment, and are fit to take their places again in the "special centers" when they are discharged.

The London board schools go still further, and the "Guild of the Brave Poor Things," at Chailey, an invalid craft school founded by Mrs. Kimmans, is under the inspection of the board of education.

Here wonderful workshops are found. All kinds of furniture and toys are made by the boys, while the girls are unexcelled in embroidery and needlework. Much attention is given to athletics, the boys playing football, the girls cricket, and both performing on all kinds of apparatus.

The most significant provisions of the rules for the London centers are the following:

BUILDING RULES.

N. B.—These rules must be read in conjunction with the building regulations for public elementary schools.

I. *Schools*.—(a) Schools for various types of afflicted children should not be held in same building unless structurally separated.

(b) All rooms for physically defective children must be on the ground floor.

II. *Playgrounds*.—Where no field or other large space has been secured, the superficial area of the site should provide not less than 30 square feet per child of open space exclusive of buildings. There should be a large covered shed open on one side, provided with ample top light, which under supervision may be used by boys and girls together.

III. *Class rooms*.—(a) Not less than 18 square feet of floor space per child must be provided.

(b) No class room should contain less than 360 square feet of floor space.

(c) The light should be ample and such as suits the mode of teaching employed.

(d) Accommodation should be arranged for medical inspection.

CURRICULUM.

The instruction should generally resemble that given in ordinary public elementary schools.

Special schools for defective children should include the following subjects: The English language, including speaking with clear articulation and enunciation, reading, writing, and recitation.

Composition, study of literary matter, history, and geography.

Arithmetic, including mental arithmetic and practical knowledge of money, weights, and measures.

Knowledge of common things, including nature study and observation lessons. Drawing.

Singing (including training in proper breathing).

Plain needlework (for girls).

Not less than six hours of manual instruction must be given weekly to each child. The forms of manual instruction must be chosen with a view of training manual and mental powers and of fitting the child to earn a living. Care must be taken to avoid the use of dangerous tools.

TEACHERS—QUALIFICATIONS.

Head teachers, when there are more than 10 children on the roll, must be certified under Schedule I of the Code, or hold the higher certificate of the National Froebel Union.

No teacher will be recognized as a head teacher unless he or she has had some experience in a certified school for cripples.

Assistant teachers must be either certificated or uncertificated teachers, or must hold the higher or elementary certificate of the National Froebel Union.

Pupil teachers are not recognized as part of the staff.

It is further prescribed that "the number of children in average attendance should not exceed 20 for each class."

In conclusion, it must be admitted that the expense of maintaining schools for cripples is heavy, but the care of the disabled child is eminently worth the while.

Modern discoveries in surgery keep alive children who could hardly have survived their first decade a generation ago. Tubercular abscesses are opened, diseased bones are removed, and the result is that the child leaves the hospital cured in the eyes of the surgeon, but a maimed and battered creature in the eyes of its fellows. If the State is not going to provide an education for these children it is nurturing a whole army of prospective paupers. It is better to care for the individual during the comparatively short period of childhood rather than during the longer period of adult life. The State, if its own advantage be considered, has no option but to provide for the crippled child and give him, at any rate, a chance of leading an independent life.

NOTE ON THE EDUCATION OF CRIPPLED CHILDREN IN NEW YORK CITY.

One of the first steps toward the solving of the problem of the education of crippled children by the public schools of New York was made in 1906, when the board of education joined forces with two private guilds. The guilds had paved the way, and it was for the board of education to recognize the system and attempt some advance.

The school equipment and teachers were supplied by the board of education; the buildings, transportation, nourishment, and general public care were looked after by the guilds.

This attempt was found successful and a further advance was made a year later, in 1907, when classes for crippled children were added to the regular public schools wherever rooms were available.

At present there are 18 classes for crippled children in the public-school system of the city of New York, and more will be added as children are found. Children from 5 to 15 are now in attendance, coming at 9, bringing a noonday lunch, and returning at 2. The expense of the stage for the transportation of these children is borne by the board of education.

The regularity of attendance, often 100 per cent, and the general progress made, both mentally and physically, justify beyond doubt the existence of these schools.

CHAPTER XII.

THE EDUCATIONAL REFORM IN CHINA.

By JOHN FRYER,

Professor of Oriental Languages and Literature, Special Commissioner for Investigation of Oriental Education, University of California.

Introduction.—The recent educational reform in China is unique in the history of the world. No national transformation has ever occurred on so large a scale, in so sudden a manner, and fraught with such far-reaching consequences to the whole human race.

Five years ago (in 1904), when visiting the scenes of my former labors in China, I found the country just beginning to recover from the humiliating effects of the Boxer outbreak. Educational affairs seemed to be at a standstill; but signs were not wanting that enormous changes were pending in the near future. What could be done to save the country from foreign domination was the paramount question that sadly perplexed the minds of the more thoughtful. It was apparently in vain that the Emperor had issued his renowned reform decrees bearing on the subject before the great coup d'état. The celebrated brochure of the sagacious statesman, Chang-chih-tung, and his elaborate scheme for organizing a new national education, were equally ignored by those in authority. The rulers of China were still groping in the dark.

At length the full answer to the momentous question came like a sudden inspiration—a ray of light bursting through the clouds that had enveloped the nation for many long ages. For China to hold her own against foreign powers, she must manifestly imitate her neighbor, Japan, and adopt at once all the main features of western civilization. It was seen that all the arts of peace and war that had given strength to western nations depended upon special branches of education. Hence these special branches must be cultivated by China at any price—even at the sacrifice of her time-honored system of national instruction. In other words, the same curriculum of study that is found in western lands must be adopted in full by China. In the impact of the modern sciences and arts of the West against the ancient philosophical system of Confucius and of Laotse, the weaker must inevitably go to the wall. When once this idea was grasped, the Government and people alike grew to be desperately in

earnest for educational reform, and the new spirit spread like wildfire in all directions.

A few months only served to establish the new order of things, which has since been struggling against difficulties to take the place of the old. The success has been phenomenal and beyond all expectation. Schools, colleges, and universities have sprung up in every province, whether under the auspices of the Government, of missionary boards, or of private individuals. In the spacious halls of many of the old Buddhist, Taoist, and Confucian temples schools are now to be found with busy scholars diligently studying the elements of the English language or of the sciences, right in the very faces of the great gilded images of Buddha, of the goddess of mercy, of the god of war, or of the god of thunder. The old examination halls have been closed and dismantled. Thousands of young people have been sent to Japan or Europe or America for a thorough education. The "new learning," as it is called, has now become a mania all over the Empire, and is the goal toward which the whole nation is pressing forward with all its newly awakened energy.

To investigate the extent and value of this educational movement was the object of my journey to China last autumn (1908). I traveled thousands of miles to some of the greatest centers of learning. High officials interested in educational affairs were interviewed and the more important institutions of recent origin were visited. This was done unostentatiously and quietly, so as not to attract attention and not to give opportunity for special preparations to be made for my visit. Depending on my long residence in China, dating from 1861, and my continual intercourse with officials and literati in their own spoken and written languages, I was able to obtain comprehensive and, what I believe to be, correct views of the existing state of things, neither ignoring the good nor overlooking the bad features. These views will now be unfolded for the information of all who take an interest in the future welfare of China.

The real object of the reform.—This sudden change from obstructing and despising western learning and civilization to a mania for acquiring them as rapidly as possible is undoubtedly an attempt to regain national freedom. The foreign yoke is felt to be more and more galling each year. If China is ever to be free she must be prepared to strike at once for freedom at all costs and risks. It is her last chance. The first step is to learn all that foreigners are willing to teach her. The next step is to use that new learning as a means to stop further foreign aggressions. This being effected, the third step is to compel foreigners to relinquish their hold and leave "China for the Chinese." From the new patriotic spirit which I have noticed in different parts of the Empire I am led to believe that "freedom's battle once begun" on these lines will undoubtedly continue to be

fought until the object is achieved, though it may take many years. It is a significant fact that a strong element of militarism forms a prominent feature in almost every school I visited. This was displayed in showy uniforms, military drill, instruction in the use of firearms, and in many other unmistakable ways.

The Chinese classical literature will be retained.—Although the old systems of competitive examination based upon writing formal essays on themes from the time-honored classics have been abolished by imperial decree, and the old forms of study are consequently almost neglected for the time being, yet the classics will have to form the backbone of Chinese literary education. Hence much valuable instruction is still being carried on, though in a modified form, in schools of the old type under competent teachers, and especially in places remote from foreign intercourse. For centuries to come Chinese classical studies will be made the groundwork of all thorough Chinese education. There will be a reaction in this direction later on when the present craze for everything foreign has begun to subside a little. Traces of this reaction are already becoming manifest, for the Chinese can no more do without their classics than we could do without our Bible or Shakespeare.

The need for a foreign director of education.—Most of the real work of the new education that is now being carried on in China is either under the direction or under the auspices of qualified western teachers, and especially those that are found in missionary schools and colleges. The random attempts on the part of government officials and private individuals to establish and carry out a new system of education that shall, at one short step, pass over from the age of Confucius to that of modern western civilization are necessarily absurd and can only meet with failures as well as involve useless expenditures of time and money. "New wine must not be put into old bottles." From the president of the new board of education downward there is a general ignorance of such requirements as curricula, methods, systems, sequences, prescribed and elective work, and general control. This is not to be wondered at. The only way out of the difficulty seems to be the appointment of a highly qualified and trustworthy foreign educator at the head of the central board of education. He should be given a free hand to select the most suitable men, whether Chinese or foreigners, as directors or assistants in each of the provincial boards. What Sir Robert Hart has been to the imperial maritime customs for nearly fifty years, such a foreign president would be to the government system of the new education in China.

The frauds in educational affairs.—Graft and peculation are not unknown in China. It is easily seen that there is money to be made by fostering the new education. Government grants for such pur-

poses seem to be too easily forthcoming, and too easily misappropriated. Private individuals also start schools with high-sounding names, large fees, and small running expenses, but with only a minimum amount of an inferior kind of education. The ignorant multitudes can not distinguish the wheat from the chaff. Hence there are to be found schools and colleges for the "new learning" in China that are little better than mere money-making devices and frauds. This is likely to be the case for some time to come. There are, however, many very praiseworthy exceptions which have come under my observation, and it is upon these that the advancement of education in China principally depends.

The Chinese do not want charity.—The Chinese are naturally a proud people and do not like the idea of charitable interference in their affairs by foreigners. Hence the establishment of large schools and colleges by western philanthropists and the conferring of foreign degrees in China upon Chinese subjects is not likely to meet with much favor or popularity among the officials and higher classes. Pure philanthropy of this kind, without deep-laid sinister motives, is not intelligible to the average astute Chinese official who wants to see a reason for everything. He can only see a deep-laid political scheme behind all our gratuitous attempts to foreignize or denationalize his countrymen by foreign education in foreign schools and colleges established nearly all over the Empire.

The sending of students to foreign countries for education.—The waiving of a portion of the Boxer indemnity fund by the Government of the United States appears to have made a profound impression upon the Chinese Government, while the suggestion that it should be applied to educational purposes has met with considerable approval. One hundred Chinese students have already been sent to America in response to this suggestion, and the same number are to go forward yearly for a certain number of years to be distributed among the various universities. This whole question of sending students to America and Europe to carry on their education has its many advantages and its corresponding disadvantages. Among the latter may be mentioned that such students often come back thoroughly Europeanized or Americanized and out of sympathy with the bulk of their comparatively ignorant fellow-countrymen, with whom they hardly care to associate. In fact these foreign-educated Chinese seem already to form a caste among themselves from which the bulk of the people, however good and worthy, are excluded. The masses of China are not to be educated by such means. It is good education near home, carried on in continual touch with relatives and friends, that is needed for the regeneration of China. In schools for Chinese girls and women, which are already very numerous, this consideration is of immense importance.

Furthermore, the Chinese, like other races, prize most what costs them trouble to obtain. To be maintained and educated abroad with a liberal allowance for a number of years entirely at the government expense is not calculated to produce a body of self-reliant men dependent on their own honest exertions; and yet it is just such men that the Government stands most in need of at the present time. The best men now in the Chinese Government or civil service are mostly self-made men, who have risen from the middle or lower classes by sheer merit or diligence, rather than the sons of wealthy individuals or officials brought up in the lap of luxury. Yet it is this latter class, or the sons of well-to-do families, who have the chief political influence necessary to obtain these gratuitous cadetships allowing them to go abroad at government expense.

European languages versus Chinese as the medium of instruction.—As to the language that should be employed in imparting the new education, there can be no doubt in the minds of Chinese and foreigners who are competent to express an opinion, that it should be Chinese. To expect the millions of Chinese people to learn sufficient of English or any other foreign language to be of any real educational value beyond that of an accomplishment is as absurd as it is mischievous. A complete western education, which requires twenty years for foreigners to acquire, can hardly be obtained in less time by a Chinese student handicapped by a new language, even if he neglects his Chinese studies altogether. For a Chinese to obtain a thorough Chinese education requires almost a similar amount of time. To try to crowd a double education into a few years, as is now being attempted, is to attempt an impossibility except in a few rare instances of precocity or extraordinary talents. To suppose that the Chinese language is incapable of expansion and of expressing all western ideas is to show great ignorance of the growth of the Chinese literature and of what has already been done in the way of translation and compilation from foreign sources.

The compulsory religious teaching and worship in Christian schools and colleges.—As previously stated, the best schools and colleges for the "new learning" are undoubtedly those under missionary auspices. In order to carry out the wishes of the subscribers in the home lands, Christian propagandism has naturally to be made the prominent feature in these excellent institutions. The study of Christian doctrines and dogmas, with participation in Christian worship, have therefore to be made compulsory instead of optional, as I feel they ought to be. It is true that in China's present emergency these establishments have recently experienced no difficulty in obtaining as many students, as they can teach, so eager are the people to get the "new learning" at any price or sacrifice of religious sentiments; but from an educational point of view, as well as in the

interests of true Christianity, such compulsory requirements should be removed and all religious teaching or exercises made purely optional. It stands to reason that to use secular education as a bait to catch Christian converts is wrong in principle, however successful it may prove in practice for the time being.

After nearly half a century of close observation of the results of this régime, I have ample grounds for this deliberate opinion, which has only been all the more strengthened during recent visits to several of the larger colleges. Among others may be mentioned the Canton Christian College, where I stayed two days, and was greatly pleased with all the secular work that is being carried on in spite of great deficiency of funds and compulsory Christian teaching and worship. By withdrawing the propagandist requirements and charging much higher fees, at the same time asking the wealthy Chinese of the province for liberal contributions, I am sure the necessary funds for almost unlimited expansion of this college would easily be forthcoming, and the cause of Christianity would be strengthened and respected. In contrast with this establishment is the Imperial University at T'ai-ynan-foo, in the Shansi Province, where I spent a very pleasant week and was entertained by an old friend, President Soothill. The endowment of this government institution is the indemnity fund for the local massacre of Christian missionaries during the Boxer outbreak. Here one of the requirements is the formal ceremonial recognition once a month of Confucius as the great sage of China. But this, though expected from the students, is not enforced by the authorities, and thus becomes a purely voluntary act which Christian converts are excused from.

The subjects of instruction in the "new learning" schools.—It is not to be wondered at that an acquaintance with foreign languages is the chief desire of the progressive, up-to-date Chinese student. It appears to him to be the key to all western knowledge and to the lucrative positions where such knowledge is necessary. Hence English literature is not valued for the treasures it contains in itself, but only as a means for enabling the student to come into profitable contact with the people and civilization of the West. Anything beyond this does not seem as yet to appeal to the average Chinese mind.

Next to English literature come the different branches of science and art, such as mathematics, physics, geography, history, political science, etc., the elements of which are taught in most of the preparatory schools. The central board of education in Peking and the provincial board of each province take the direction and oversight of all the government educational affairs, arrange the curricula, and afford facilities wherever required.

There are many colleges established by the Government in different parts of China for special subjects to suit modern demands, such

as agriculture, engineering in all its branches, pedagogy, medicine, military and naval science, jurisprudence, the principles of government, etc. I visited several of these, and although a few were very unsatisfactory, yet others showed most encouraging signs of progress and of future benefit to the nation. The most noteworthy were the technical and industrial schools where theory and practice were combined. At Tientsin and Tsinan, for instance, were excellent schools of this description to which I paid special attention. Handicraftsmen are invited to come from the most remote towns and villages to learn the newest and most economical methods of carrying on various trades or art work by courses of actual practice. These, on returning to their homes, carry with them new methods and new ideas which necessarily must be highly beneficial. In the establishment at Tientsin I found no less than ten departments in active operation, with a large showroom and sales room where the various products could be examined and purchased or orders taken. In this way the school is to a certain extent rendered self-supporting. The departments of most interest to me were textile manufactures, pottery and earthenware, drawing, painting, carving and sculpture, lucifer matches, wood, iron, and metal work, electric apparatus, embroidery, woolen rugs, matting, and scientific apparatus for elementary educational purposes.

These schools of practical industry are laying a foundation for the future wealth and prosperity of the nation of far more real value than the military and naval science which are made to occupy the foreground in almost every picture of China's progress in civilization.

Schemes for the establishment of universities in China by foreigners.—The idea is gaining ground among various benevolent western people who are interested in the welfare of China that the country requires large free universities to be established in different localities and run in the same way and upon the same lines as the universities in our own home lands. Schemes for several such universities are now being discussed, and one or two of them seem to be in a state of preliminary organization. The wealthy philanthropists of Europe and America are certainly doing well in this respect as far as they understand the situation; but the means employed must not be such as to denationalize the Chinese or lead them to forsake the study of their own language and literature; because upon these the real education of the bulk of the nation must necessarily depend. Several generations of preparatory work are needed in the different grades before full-grown universities will become a necessity. To understand this it is only requisite to remember that a university for China must be essentially Chinese and conducted in the Chinese language, with foreign languages and foreign literature only as accom-

plishments or for specific purposes, rather than as the main feature of the curriculum. The degrees conferred must of course be Chinese degrees, recognized and granted by the Imperial Government. Furthermore, it must not be forgotten that China has not yet a universal spoken language of her own in which oral instruction can be given. The need for unification of the spoken language is far greater than the need for commencing foreign universities. Attempts have been made by the Imperial Government in this direction by decrees ordering that the teaching in all schools be conducted in the Mandarin language, which already obtains as the spoken language of fully one-half of the Empire; but this change will take many years to accomplish. The only places where I found schools professing to teach the Mandarin language to those who speak other dialects were at the college at Nanking for students from Java and the Straits Settlements, and at Singapore and Penang in schools under Chinese consular direction, where only the southern dialects of China are usually spoken by the Chinese residents.

The Chinese should endow their own universities.—During my visit to Hongkong considerable interest was being manifested toward the establishment of an English university in that colony for the benefit of Chinese residents. One very sensible condition of the promised land and buildings was that a similar sum must be subscribed by local residents for a sufficient endowment. This sum did not appear to be forthcoming. Surely this is an excellent test as to the real need for such institutions. If the same method were applied to each of the different schemes for free foreign universities for China, it might save oversanguine promoters from having a "white elephant" upon their hands.

The good work of the Chinese Young Men's Christian Association.—I am glad of this opportunity to testify as to the benefit which is being conferred on the Chinese educational movement by the different branches of the Chinese Young Men's Christian Association. As an instance, the Shanghai branch, which now numbers 1,000 members, has day and evening classes for a great variety of practical subjects of a secular character, taught by competent teachers. There is no compulsory attendance on religious teachings or worship whatever. Associate members have only to be of good moral character, paying a small annual subscription irrespective of creed or religious views. At Tientsin and other educational centers equal activity is being displayed, while the Christian character of the association and of its active membership is in no way being compromised. One interesting feature of this Chinese Young Men's Christian Association work is the advising and aiding of Chinese students who wish to go to America to carry on their studies or to complete their education. A special committee in China and in America keeps in sympathetic

touch with all such students until they are satisfactorily settled in American colleges or universities and have no need for further help.

The dangerous pitfalls.—I would remind all who are interested in forwarding the new education in China that there are many dangerous pitfalls into which young China is very liable to stumble. The student of the "new learning"—and especially if educated in America or Europe—is too apt to exaggerate the importance of his knowledge with regard to the lucrative and political benefits he thinks it ought to produce. He chafes at the checks and rebuffs which he is liable to receive at every turn from his own relatives and friends, as well as from government officials of the old school. He wants to rush matters and to create a new nation in a day, with a new government in which he, of course, shall be one of the most important personages and enjoy one of the highest positions. The old ethical teachings of Confucius would have taught him the exercise of more meekness, patience, and perseverance. The deficiency in these qualities, together with a confused and inadequate knowledge of the real foundation of western civilization, are almost certain to lead him toward the pitfalls of anarchy and rebellion, ending in what may prove to be a frightful national collapse. The thoughtful among the Chinese of the old school, as well as a few of the more patriotic and discerning among the followers of the "new learning," are even now predicting some such catastrophe as the result of too much superficial western education without sufficient ballast or experience. Fortunately this evil has a tendency to right itself and every year ought to lessen the danger.

Conclusions—The outlook.—In conclusion I would remark that the result of my investigations convinces me that the educational position of China is full of hope and encouragement in spite of all drawbacks and disadvantages. It is easy to see that the ages of stagnation and slumber arising from long isolation are now passed, never more to return. Whatever may happen, the outcome will eventually be for the nation's good. How far her statesmen will seek to preserve all that is best in her old system of education, her national characteristics, her wonderful genius, her manners and customs, her religious beliefs, and her form of government, is a problem time alone can solve. But there will be no relenting or turning back on the path of progress, however distant and difficult may be the goal, however many reactions may arise, and however severe the baptism of fire which she may have to pass through.

May we not therefore very appropriately use the words of Tennyson and say of Chinese education—

Ring out the old, ring in the new;
Ring out the false, ring in the true.

CHAPTER XIII.

CURRENT TOPICS—FOREIGN.

Contents.—University reform at Oxford.—Teachers' training colleges in England and Wales.—Cuban schools.—Education in Guatemala.—Elementary schools of Venezuela.—Primary and secondary education in Brazil.—The Darwin celebrations at Cambridge.—Tercentenary of the University of Oviedo.—Anniversaries of the Universities of Leipzig and Geneva.—Educational notes from consular reports.

UNIVERSITY REFORM AT OXFORD.

The discussion of university reform has been occupying the attention of the educated world of England in recent years with a number of practical results. The investigations of the parliamentary committee at Oxford in 1850 led to many recommendations of reform in the university economy, and other suggestions for reform in the courses of study have been made from time to time since then, with a view to bringing the university in accord with the changes of interests in the intellectual world. The scope and motive of the more recent calls for modifications in the management of the university and its studies, since the enlargement of the latter to admit modern science to a share in the university honors, are concisely brought out in the presentation of them by Lord Curzon, the chancellor of the university, under the title "Principles and Methods of University Reform." The chancellor is an earnest advocate of reform and carefully digested the suggestions before him, to which he added his own recommendations and opinions. This work deals with a number of details of proposed reforms which, from their nature, can only be fully understood by those who are familiar with the history of the university and its relation to English society. There are two points, however, which are of general interest outside of England, one relating to the social influence of the university, while the other illustrates, in a way, the conservatism of its position in relation to the rivalry between the humanities and "modern" or practical studies.

The first of the subjects referred to is the recent departure in extending university influence to the poorer classes, "the duty of Oxford to the poor," as Lord Curzon phrases it, a duty which, he points out, should not make us forget the duty of Oxford to the

well-to-do and leisured classes—the so-called “governing classes”—members of which are called upon to take prominent parts in public life, and they are immeasurably better fitted to do so by the equipment and experience gained at Oxford. “It is as desirable,” he says, “that Oxford should educate the future country squire, or nobleman, or banker, or member of Parliament, or even the guardsman, as it is that it should sharpen the wits of the schoolmaster or cultivated artisan.” This catholicity of view pervades Lord Curzon’s discussion of each proposed step in reform.

The universality of the influence of the university, he maintains, must be preserved. The changed attitude of the working classes themselves toward the university is commented upon. “It is clear that for the first time since their appearance as a political force, and largely in consequence of it, many of the working classes are looking with eager eyes to Oxford to assist them in the task of preparation for their new and arduous responsibilities.” Their feeling toward the university is no longer one of hostility, but they are now beginning to turn toward it, and even if not all may have a full appreciation of its beauty and romance, they yet “associate its name with a liberal and humane training which no modern or provincial university can give them.” “They are under no illusions as to their own shortcomings. The extension of the franchise, participation in local government, and the increasing influence of trade organizations have given them power, but power unaccompanied by knowledge. This knowledge, which an education arrested at the primary stage is unable to furnish, can alone enable them to wield their power for the advantage of themselves and the nation.” Provision is made for the relief of the poor and others at Oxford in the noncollegiate system, which may be briefly described as a means of affording university instruction to those who are not able or do not desire to live in colleges. University extension also, by which is meant the classes and lectures established in the large industrial centers by the university with examinations directed from Oxford, has been of great assistance in providing instruction for persons of limited means or whose occupations prevent their attendance at a university. In this way Cambridge and Oxford have set an example in directly influencing the masses which has been followed elsewhere; for example, by universities in Spain and France.

The other point treated by Lord Curzon, which is of great interest to the intellectual world at large as being significant of a concession of scholastic requirements at Oxford to the modern demand for the practical, is the proposed suppression of compulsory Greek in the entrance examinations leading to the B. A. degree. The objections to retaining it, mentioned by Lord Curzon, are that it keeps out some of the best products of secondary schools where Greek is not taught,

but which train their pupils for professional or business occupations. Students who propose to take degrees in mathematics and science are also deterred from entering Oxford by the barrier of compulsory Greek, and there is a growing public sentiment in favor of removing this barrier while leaving Greek optional, so that it would still retain an honored place in the university course. So far the attempts to modify the existing test have failed; a motion to make Greek optional for candidates in mathematics and science was defeated in congregation in 1904 by a vote of 200 to 164. But the question is by no means definitely settled, and among the proposals to satisfy the growing opposition is one which Lord Curzon himself favors, viz., the abolition of responsions altogether and the substitution thereof of a university entrance examination independent of those appointed by the several colleges. If this suggestion should be adopted, the question of compulsory Greek in their examinations would, it may be presumed, be settled by the colleges each for itself.^a

TEACHERS' TRAINING COLLEGES IN ENGLAND AND WALES IN 1907.

BY W. A. BALDWIN, PRINCIPAL OF THE HYANNIS (MASS.) STATE NORMAL SCHOOL.

To a Massachusetts normal school man coming for the first time into contact with these schools the following points stand out:

1. They vary greatly in character. It is hard to find a basis for classification.
2. There are no imperial state normal schools. Nearly all of them started as denominational institutions.
3. All now receive imperial grants based upon the number of students.
4. Because of these grants the Government claims the right to inspect and to regulate entrance requirements, curriculum, and diploma requirements.
5. The tendency is from denominational toward secular control, toward more imperial domination and more control by local or county council boards, even to the extent in many cases of giving over some of these schools to the county councils.
6. The amount of practice teaching is only six weeks.
7. A large majority of those coming into the training colleges have had experience as pupil teachers, though such experience is not now required.

^a The concession made regarding the entrance examination in Greek in case of the Rhodes scholars is explained on p. 203 of this volume.

8. The curricula in comparison with those of the Massachusetts state normal schools contain (*a*) more literature, especially religious literature and word training; (*b*) less science, especially in hygiene and physiology; and (*c*) less psychology. The movement is toward more science and more practical work.

9. The work is more often presented in the lecture form than with us. The teachers are called lecturers.

10. One person is designated the master of method, and to him is delegated much of the professional work.

11. There is much more formality and less of simplicity than we have in our schools. Usually the grounds are surmounted by a high brick or stone wall. Often one finds a porter in uniform answering the bell. The lecturers are in university cap and gown. The faculty sit at lunch upon a raised dais above the students. The attitude of teachers and pupils toward the principal and of servants toward teachers and principal is much more deferential than with us.

12. The men and women are, with few exceptions, in separate schools, and even when in the same school are taught in separate classes.

13. Written examinations form the basis for entrance, promotion, and graduation.

14. The imperial inspectors are very much in evidence, though the tendency is for these inspectors to become advisers rather than dictators.

Having consulted with one high in the councils of the normal colleges of England, I was advised to acquaint myself with five colleges which might serve as types of all others in England and Wales. These I will very briefly describe.

ST. JOHN'S COLLEGE.

The following quotations from the current prospectus of St. John's College, of Battersea, London, will give some idea of this college as it is at present:

The college is in connection with the national society, which contributes generously to its maintenance and support. The buildings have been largely extended, and include modern and well-equipped laboratories for chemical and physical science.

The college stands in its own grounds of some 5 acres, containing a large and well-fitted gymnasium, covered fives courts, tennis courts, a running track, and a practice ground for cricket and football; a match ground is rented at Raynes Park. There is a bicycle house for students' cycles in the college grounds. A Morris tube range has been added for rifle practice.

There is a students' common room, and in connection therewith a library for lighter reading, paper and magazine clubs, etc.

There is an excellent college library and museum, and a dark room for photography.

The college has its own three-manual organ and music rooms. Facilities for practice are given to students of musical taste, on the recommendation of the music master.

Rules of admission.—Candidates for admission to this college must be confirmed members of the Church of England, or be ready and desirous to be confirmed.

They are allowed to present themselves for examinations, subject to the following conditions, viz:

That they (a) intend bona fide to adopt and follow the profession of teachers in elementary schools; (b) having been pupil teachers, have successfully completed their apprenticeship; (c) not having been pupil teachers, will be more than 18 years of age on August 1 in the year in which they are admitted to the college.

Terms of admission.—Candidates selected for admission into the college (I) pay an entrance fee of £25. Of this sum a deposit of £5 is paid on the final acceptance of a candidate for admission; the balance of £20 is paid on entrance into the college in the September following the examination. No charge is made for board, lodging, washing, medical attendance, or education. Books (except net priced books) necessary for the prescribed course are sold to students at half the published price. (II) They are required by the board of education to enter upon a legal undertaking to serve for seven years in an approved school, or, in the event of failing to complete this obligation, to repay to the board a due proportion of the grant made on their behalf, calculated on the unexpired portion of the seven years.

Main rules of the college.—1. Students rise at 6.30 a. m., the first lecture commencing at 7 a. m., and they retire to bed at 10.30 p. m.

2. There are four meals in the course of the day, viz: Breakfast at 8 a. m., dinner at 12.53 p. m., tea at 6 p. m., and a light supper at 9.15 p. m.

3. The students are required to spend a certain portion of each year for the purpose of learning the practical part of their profession in the schools used by the college for this purpose.

4. Wednesdays, Saturdays, and saints' days are half holidays, and the major portion of the other afternoons is set aside for recreation. Outside these hours students are not allowed to leave the college without special permission. On Sundays students are at liberty to leave the college after morning service and must return in time for evening service.

Chapel services.—Divine service is held in the college chapel and is attended by all students daily at 9 a. m. and 10 p. m. The services on Sunday are at 10.30 a. m. and 7 p. m.

The holy communion is celebrated at 8 a. m. every Sunday; also on the first Sunday of the month at 10.30 a. m.

The students are formed into a volunteer corps, as a distinct company of the Second (South) Middlesex V. R., officered by members of the college staff. Membership is optional; the expense is defrayed by the college. Company drill takes place regularly in the college grounds.

The reader may see that much attention is given to athletics and military drill, which have entirely replaced the old-time gardening and other useful labor; that the denominational requirements are still in force, though contrary to the last act of Parliament; that the expenses to students are small; and that the regulations regarding service as teachers are rigid.

STOCKWELL COLLEGE.

Stockwell College, like St. John's, is in the thick of London. But, unlike St. John's College, it is a school for girls, is undenominational,

and is under the management of the British and Foreign School Society.

This school receives young women from all parts of the kingdom for two years of residential work. I was pleasantly impressed with the character of the work, particularly in three directions: (1) The atmosphere of refinement; (2) opportunities for practical science teaching; and (3) the strong work in the practice school connected with the college.

The curriculum at the Stockwell Training College consists of the following: Scripture, two lessons weekly; English language, literature and composition; outline course on the structure of English language; arithmetic; algebra; geometry; physics, to be taken by some of the students; chemistry, to be taken by some of the students; botany, to be taken by some of the students; history and geography, drawing; singing and theory of music; needlework; the principles of teaching; reading and repetition; physical training; optional subjects—French, mathematics, education, hygiene, clay modeling, and wood carving.

KING'S COLLEGE.

King's College (London University) has 54 men who are in the training classes. The arrangement here is similar to that at Oxford, Cambridge, Liverpool, and other universities. The students take the regular college courses with the other students, covering the same amount of academic work in the same time. Besides this academic work these Teachers' College men are required to take considerable work in method, physical training, and teaching under criticism.

Some of the advantages claimed for this plan are: (1) These students will be well trained on the academic side. (2) They will be associated with other students from widely different conditions and with different aspirations, and so will get broader views of life than if trained at local training colleges.

ISLINGTON (LONDON) DAY COLLEGE.

This school is one of the newer type of training colleges organized under the act of 1902 by the London County council. It is of course undenominational, though religious instruction is required. It is coeducational, though the men and women are instructed in separate classes. It is intended primarily for training the students, both men and women, of that part of London, and after a certain fixed time no applicants will be received from outside the city of London.

I found this school in a modern, well-equipped brick building, with what seemed like an able staff of instructors. The school lacks ample grounds and a practice school, depending, as do all schools of this type, upon public city schools in the vicinity for practice.

I was favorably impressed with the work which I saw in method, in science, and in physical training. The courses offered are:

First year only: English language and literature as a definite study, history, geography, mathematics.

Second year only: Principles of teaching, practice teaching.

Both years: General elementary science (chemistry, physics, nature study, hygiene), art, French, English literature in connection with reading and recitation, vocal training, music, physical training, needlework, manual training.

THE LONDON DAY COLLEGE.

This school represents the latest development in teachers' training colleges. It is closely affiliated with London University, its principal, Prof. John Adams, being a full professor in the university, and its pupils being students of the same. A substantial building was completed in the spring of 1907. It is situated near the corner of High Holborn and Southampton streets, one of London's busy traffic centers, and so in a noisy, dusty place. The building is a fine modern structure and is being well equipped, particularly as to laboratories and library.

The purpose of the school is to train teachers for secondary schools, which means in England something between a high school and a private school for children ranging in age from 8 to 16 years. The students now attending this college are all carrying the academic work of the full college programme and take the professional work as extras. This professional work consists of physical training, education, and critic or model lessons.

Those in authority are not satisfied with present arrangements. They hope that in the near future the training college students may be required to graduate from a three-year college course before coming to the training college, and then may devote all their time for one year to professional work.

DENOMINATIONALISM AND PROGRESS.

The contention regarding religious instruction has, from the first, blocked progressive legislation. It has kept the training of teachers mainly in the hands of denominationalists, and out of the hands of the state and local secular organizations. As has been already noted, in the act of 1902 an attempt was made to regulate this matter. Similar attempts have since been made, until, in the official regulations for 1907, I find this paragraph:

In no circumstances may the application of a candidate be rejected on the ground of religious faith or by reason of his refusal to undertake to attend

or abstain from attending any place of religious worship or instruction in religious subjects in the college or elsewhere; nor on the ground of social antecedents or the like.

This regulation has met with serious opposition, and even with the refusal on the part of some denominational colleges to obey the regulation. Great efforts are being made to effect a compromise, and it is hoped that the education bill which is now before Parliament may solve this question in a manner satisfactory to all parties.

TRAINING VERSUS ACADEMIC WORK.

At first the preparation for teaching consisted entirely of practice under experienced teachers. Then some further academic work was required. Next, instruction in methods and more academic work was demanded. Gradually the practice work has diminished and the academic work has increased until in many schools the former has almost reached the vanishing point and the latter has dominated the situation.

In the best schools an attempt is made to keep a proper balance between the amount of attention given to the practice work on the one hand and the academic work on the other. To keep such a balance is not an easy matter, particularly in the training departments of universities. The board of education have this to say regarding the matter:

The board are greatly concerned by the increasing difficulty of securing for students who take university courses adequate instruction and training for the main business of their profession. The pressure of their academical work is so heavy that such students are at present often excused from courses in physical exercises and in manual training; their training in the art of teaching itself and other professional subjects is often lamentably inadequate, and it is impossible at present to impose on them the instruction in hygiene, which should form an essential part of the equipment of a teacher, and more especially for service in a public elementary school.

The omissions are indefensible, and the conflict between professional and academical work seems to the board to call for more serious attention than it has hitherto received.

In the universities there is a tendency to encourage those who desire to be teachers to take the same academic work as is taken by the other students and to get their professional work in between. It goes without saying that in a university in which the ordinary students are given all of the work which they can well do, one of two things must happen, the student who is preparing to teach must neglect the professional training or he must overwork to the detriment of his health.

Then, too, under such conditions it is not possible to cultivate the right attitude toward the professional training. The subject side is continually emphasized. The way in which the human mind,

and particularly the individual mind, develops receives scant consideration.

It is evident to any intelligent student that the regular academic subjects are considered by the college authorities as vastly more important than are any strictly pedagogical subjects. The method used even in the presentation of pedagogical subjects is the lecture method. The instructor, therefore, does the thinking, while the students take notes which furnish the basis for examinations.

While listening to lectures on the importance of pedagogical principles, these same principles are being violated in the student's own case, and he is subconsciously drinking in a pedagogy the opposite of that which is being presented in the lectures.

The tendency in all instruction is, always has been, and always must be, toward the domination of the book, the lecture, the authority of a dogma, a system, or an organization, the instructed being the recipient. Our universities naturally become strongholds for this type of instruction. University graduates are always in danger of making a fetish of such instruction, and it is not strange that they are demanding an increasing amount of it for those who are to be teachers.

The greatest work which the normal college has done has been along the opposite line, and as a reaction against such instruction. Following the lead of the great educational reformers it has put the little child into the midst, making much of his individual development. It has emphasized self-activity and self-realization. To these ends it has insisted upon the inductive method for the initial steps in all study, and upon the question and discussion form, as the typical one for recitation room work.

In my opinion, if the normal college is to hold its place as a professional school, it must hold fast to this as its particular mission, not alone for the lower schools but for the universities themselves.

It is true that there should be much and strong academic work in the training colleges, but this academic work should be done in accordance with the pedagogical principles that are being developed in the pedagogical department, otherwise we will have a house divided against itself.

THE PRACTICE SCHOOLS.

The arrangements for practice work are, in many cases, undergoing great readjustments. It is not, therefore, surprising that this part of the work is often very unsatisfactory. In times past, when all entering students had served an apprenticeship of several years under strong teachers, the practice work was not so important, but now when an ever-increasing number of applicants are coming with little

or no experience as teachers, the practice work becomes of the utmost importance. Happy are the schools which have ample practice departments in connection with their own grounds, and these liberally supplemented by opportunities for practice in public elementary schools near at hand.

TRAINING OF STUDENTS ABROAD.

The broad-minded policy of allowing selected students a third year of study abroad has proved somewhat disappointing in its results. The introduction to the regulations for 1907 has this to say on the matter:

The conditions laid down for affording to selected students the privilege of a third year to be spent in a foreign country have hitherto been designed mainly for the purpose of extending to English teachers in public elementary schools a general knowledge of foreign methods of teaching and school organization, so that the schools in which they were ultimately to serve might profit by the information and suggestions so derived. Although in some cases students have undoubtedly made good use of the opportunities which they have enjoyed, the far more frequent failure of the regulations having this object in view, forced upon the board the necessity of reconsidering the whole question; and it was determined, as set forth in the regulations published last year, to limit the privilege of a third year spent abroad to teachers who had already, by substantial service in the schools, acquired the power to see in the foreign country the real points of interest and difference, and to apply their experiences in a practical and effective manner on their return to England.

TRAINING COLLEGES IN 1907.

The number of teachers' training colleges in England and Wales in 1907 were as follows: 53 residential colleges with 6,225 students, and 23 day colleges with 3,541 students. Of the 53 residential colleges, 33 were Church of England, 11 undenominational, 7 Roman Catholic, and 2 Wesleyan.

CONCLUSION.

In closing this brief report on the work of the training colleges of England and Wales I can not better indicate the spirit of hopefulness and progressiveness which pervades these schools than by quoting the closing remarks of the board of education, as found in the introduction to the regulations for the training of teachers.

The board directly or through their inspectors will at all times afford the best assistance in their power to any college committee or teaching staff who seek advice with a view to increasing the usefulness of their college; and they will, on the other hand, give the fullest attention to any well-considered suggestions, whether for the improvement of the training-college system or for the treatment of the numerous problems yet to be solved in the training of teachers, which the collective or individual experience of training-college authorities may prompt.

The influence of a body of thoroughly competent, zealous, and conscientious teachers in our public elementary schools may plainly be an immensely important factor in our national life; and apart from their professional work, the teachers as a body of well-educated men and women may render services out of all proportion to their number in the population in the performance of the common duties of citizenship. The importance to a nation of a thoroughly equipped and efficient system of training colleges is now fully admitted, and the board believe that the authorities of each training college will find no lack of public sympathy and encouragement in all their efforts to make the college of still greater public utility, whether by improving the quality of the formal instruction provided by the college, or by developing wisely those social activities which are not the least valuable element of college life, or by fostering all the influences which will lead students to form for their own guidance in after life a high conception of the duties of a teacher and of a citizen.^a

CUBAN SCHOOLS.

The number of the journal *La Instrucción Primaria* for February, 1909, published by the secretary of public instruction of Cuba, has the following statistics of Cuban schools for January, 1908:

Number of teachers.

Provinces.	White.		Colored.		Total.				Grand total.
	Men.	Women.	Men.	Women.	White.	Colored.	Men.	Women.	
Habana.....	334	616	7	21	950	28	341	637.	978
Oriente.....	159	437	27	86	596	113	186	523	709
Matanzas.....	165	389	4	22	554	26	169	411	580
Santa Clara.....	282	679	15	59	961	74	297	738	1,035
Camaguey.....	70	167	2	8	237	10	72	175	247
Pinar del Rio.....	192	203	5	9	395	14	197	212	409
Total.....	1,202	2,491	60	205	3,693	265	1,262	2,696	3,958

Enrollment and attendance.

Provinces.	Enrollment.					Mean daily attendance.				
	White.	Colored.	Boys.	Girls.	Total.	White.	Colored.	Boys.	Girls.	Total.
Habana.....	23,984	10,053	18,199	15,838	34,037	17,004	6,820	12,711	11,113	23,824
Oriente.....	16,411	9,292	13,390	12,313	25,703	12,127	6,701	9,817	9,011	18,828
Matanzas.....	10,241	7,665	9,206	8,700	17,906	8,104	6,011	7,278	6,867	14,145
Santa Clara.....	21,121	9,967	16,890	14,198	31,088	16,083	7,411	12,760	10,734	23,494
Camaguey.....	5,701	1,205	3,636	3,270	6,406	4,431	922	2,796	2,557	5,353
Pinar del Rio.....	10,573	4,831	9,163	6,241	15,404	7,768	3,545	6,744	4,569	11,313
Total.....	88,031	43,013	70,484	60,560	131,444	65,517	31,440	52,106	44,851	96,957

^aAnyone desiring fuller information concerning the present conditions and requirements may secure a copy of "Regulations for the Training of Teachers and for the Examination of Students in Training Colleges," by sending 6d. (12 cents) with the necessary postage to Wyman & Sons (Ltd.), 109 Fetter lane, Fleet street, E. C., London, England.

For fuller information regarding the historical side of the subject, address Mr. Twentymann, Library, Board of Education, London, England.

Proportion of attendance to enrollment.

Provinces.	Per cent.
Habana-----	69.99
Oriente-----	72.89
Matanzas-----	78.99
Santa Clara-----	75.57
Camaguey-----	77.51
Pinar del Rio-----	73.44
Average-----	74.39

AGRICULTURAL SCHOOLS IN CUBA.

This office has received, through the Department of State, a translation of an act of the Cuban legislature (approved by the President of Cuba July 10, 1909), creating six agricultural schools, to be established in the vicinity of the principal capitals of the island. The studies are to cover a course of two years, and will comprise, for the first year, applied arithmetic and drawing, applied elementary physics and chemistry, elementary natural history, agriculture, agricultural hydraulics, farm practice. The studies for the second year are elementary practical zootechnics, practical plant analysis, elementary mining, rural mechanics and industries, practical agricultural analysis, accounting, and farm practice. The maintenance and instruction of students will be gratuitous. They are to be appointed by the municipalities, and half of them must be sons of farmers. The schools will be under the supervision and inspection of the Department of Agriculture.

EDUCATION IN GUATEMALA.

The secretary of public instruction of Guatemala presented a report to the national legislature upon the condition of education in that state for the year 1909, from which the following notes are taken:

From a brief sentence in the introduction to this report it is clear that the educational authorities of Guatemala are fully alive to the change in the spirit of education which has come about in Latin-American countries in the last few years, a notice of which appeared in the last report of this bureau. This sentence reads as follows:

Notwithstanding the difficulties it has encountered our public education has proved satisfactory to the head of the state, who, with characteristic patriotism, has succeeded in impressing upon it the eminently practical character demanded by the present times, and which is in accordance with the ideals of republican and democratic government.

In reading this summary we are to keep in mind that Guatemala has a population of some 1,883,000, about 60 per cent of whom are Indians, most of the remainder being of mixed blood.

Primary education.—There were 1,330 schools belonging to this branch of instruction in operation in 1908, with an attendance of 51,820. This was an increase over 1907 of 68 schools and 758 pupils. On February 15, 1909, the President of the Republic issued the following order:

Being desirous of enlarging the horizon of studies of our youth and recognizing the importance of modern languages as a medium of communication, especially to Guatemalans at the present time, in view of the completion of the interoceanic railway, it is ordered that the practical study of English be made obligatory in the primary schools from now on, and that applicants for teachers' positions should be able to speak English and translate French correctly.

In order to make this order effective a school of English was established in the National Central Institute for men at the capital which teachers of both sexes were required to attend.

Secondary education.—There are six institutions of secondary instruction in Guatemala, their official titles being institutes and normal schools, with an attendance of 959 in 1908, of whom 94 were young women. The graduates of these institutions receive the degree of graduate in science and letters, of whom there were 28, or a teachers' certificate, only 6 taking this certificate in 1908. The graduates in science and letters are prepared to enter the professional schools.

An idea of the grade of studies in these secondary schools can be obtained from that of the National Central Institute for young men at the capital. The course includes English, French, Spanish, geography (descriptive and physical), universal history and history of Central America, arithmetic, algebra, geometry and trigonometry, physiology, zoology, physics and mechanics, botany and mineralogy, grammar and rhetoric, shorthand, chemistry, civics, and economics. In the course of study of the central normal school for teachers and institute for natives, a course in methodology, theoretical and practical, is added in order that the students may learn the methods of teaching and apply them in the annexed school of application. A chair of morals was established in this school besides one of agriculture and another of manual work. Pedagogy and drawing are also among the subjects of study in these schools.

There are seven practical schools in the capital and departmental capitals, four for young men and three for young women. In these schools are taught carpentry, tin and iron working, weaving, book-binding, and shoemaking, besides the usual secondary studies.

The national commercial school at the capital had 144 students in 1908. The course includes calligraphy, Spanish grammar, English, commercial arithmetic, bookkeeping, accounts and banking, commercial law, and commercial geography.

Higher education is represented in Guatemala by the schools or faculties of medicine and pharmacy and of law. In the former of these 129 students were entered in January, 1909, together with 6 women attending the course of midwifery. Among the students were 18 from Honduras, 11 from Nicaragua, 2 from Costa Rica, 1 Spaniard, and 3 Mexicans, the rest being Guatemalans. The report of the medical school for 1908 is largely taken up with an account of the Fifth Pan-American Medical Congress, which met at Guatemala in August of that year and was attended by delegates from all American countries. Many papers by physicians from all parts of the United States appear in the list of works presented to the congress.

The law faculty or school was attended by 44 students in January, 1909, who were divided among the five years of the course. There were also 3 students in the school for notaries. The course includes constitutional law; philosophy of law; civil, international, mercantile, and criminal law; the philosophy of history; forensic and literary oratory and rhetoric; administrative law; judicial proceedings; and political economy.

A periodical is published by the law faculty containing articles upon legal and kindred subjects, which exchanges with similar publications in foreign countries.

ELEMENTARY SCHOOLS OF VENEZUELA.

Population (In 1907), 2,646,835.

The Boletín de Estadística, an official journal of the Venezuelan Government, in the number for November, 1908, published the following statistics relating to the elementary schools of that country for the latter part of 1907: The total number of schools was 1,165, of which 586 were schools for boys, 459 for girls, and 120 were mixed. Out of this total, 161 were private schools—83 for boys, 46 for girls, and 32 mixed. The schools were classified as national, federal, and municipal; the national numbering 702, the federal 112, and the municipal 190. The enrollment was 35,786, of which number, 19,480 were boys and 16,306 were girls. The private schools showed an enrollment of 3,442 (2,339 boys and 1,103 girls), or nearly one-tenth that of the public schools. The mean attendance is given as 25,982 in the public schools and 2,689 in the private schools, which would be 72.63 per cent and 78.12 per cent of the enrollment, respectively. As to age, there were 4,806 pupils under 7 years of age, 13,578 were between 7 and 10, 9,621 were between 10 and 12, 5,882 were between 12 and 14, while 1,899 were over 14.

PRIMARY AND SECONDARY EDUCATION IN BRAZIL.

[Reported by Vice and Deputy Consul-General Joseph J. Slechta, Rio de Janeiro, March 12, 1909.]

The first attempt to give anything like detailed figures covering the general educational situation in Brazil has appeared in the recently published volume of the bureau of general statistics under the ministry of industry, transportation, and public works. The data as to population is taken from estimates published by the same authority and is mainly deduced from calculations based on the census of 1900. The estimates are undoubtedly liberal, even from the point of view of the director of the bureau from which they issue. In a few of the States the number of schools and the figures for enrollment are not altogether complete, since it was impossible to secure complete returns from some of the rural districts, but in the main these figures may undoubtedly be regarded as giving an adequate idea of the present educational facilities in Brazil.

State or district.	Popula- tion.	Primary education.			Secondary educa- tion.	
		Schools.	Enroll- ment.	Attend- ance.	Schools.	Enroll- ment.
Alagoas.....	785,000	271	13,255	10,959	7	837
Amazonas.....	379,000	250	5,476	4,495	5	450
Bahia.....	2,287,000	1,007	47,288	32,135	24	2,012
Ceara.....	886,000	382	16,267	12,982	16	1,183
Federal District.....	858,000	419	57,271	36,106	43	4,662
Espirito Santo.....	297,000	175	6,359	4,674	6	439
Goyaz.....	280,000	162	6,134	4,149	4	347
Maranhão.....	562,000	217	11,941	8,231	9	638
Matto Grosso.....	142,000	107	5,288	4,677	7	466
Minas Geraes.....	3,960,000	2,178	119,613	66,232	51	4,281
Para.....	568,000	433	19,870	17,093	11	938
Parahyba.....	520,000	223	9,870	6,852	7	527
Parana.....	406,000	309	13,566	10,640	7	488
Pernambuco.....	1,310,000	386	21,139	15,104	17	1,613
Piauhv.....	400,000	146	7,754	6,030	6	438
Rio de Janeiro.....	968,000	485	24,773	16,075	14	1,486
Rio Grande do Norte.....	279,000	152	7,601	6,547	5	378
Rio Grande do Sul.....	1,400,000	1,516	67,370	50,809	26	3,605
Santa Catharina.....	353,000	376	14,159	10,535	9	905
São Paulo.....	3,397,000	1,708	82,089	61,066	46	4,146
Seripe.....	413,000	245	8,839	5,797	7	419
Acre Territory.....	65,000					
Total.....	30,515,000	11,147	565,922	391,188	327	30,258

These figures include schools of both public and private character, the former including state; that is, rural as well as municipal schools. The total of primary schools includes 1,815 public municipal schools, 7,089 public schools under state control and mostly in the smaller towns and villages, and 2,243 private schools, most of which are in the larger towns and cities. The state schools, improperly designated as rural schools, have a total enrollment of 348,327 and an attendance of 240,690; the public municipal schools have an enrollment of 106,754 and a total attendance of 69,432. Private primary schools have a

total enrollment of 110,841 and an attendance of 81,066. Of the total of 327 institutions of secondary education, 29 are public and 298 are private as to control, the former having an enrollment of 4,031 and the latter 26,258, no figures being available for the attendance in secondary schools.

Taking the total enrollment in primary and secondary schools as a liberal indication of the school population in Brazil, slightly less than 3 per cent of the total population of the Republic may be regarded as enjoying school privileges. Considering the fact of Brazil's very high proportion of rural population as compared with the total population, this percentage of school population takes on added significance in view of the great lack of educational facilities outside of the cities and towns. In the case of the Federal District, for example, where the population is almost entirely urban, there is a population of 858,000 and a school enrollment of 61,933, while the State of Alagoas, with a population almost as great and with the exception of a few coast towns altogether rural, has a school enrollment of 14,092. The State of Pernambuco, with a population almost entirely rural, with the exception of the capital, Recife, has a school enrollment of 22,852, the total population being 1,310,000.

THE DARWIN CELEBRATIONS AT CAMBRIDGE.

The celebrations commemorating the centenary of the birth of Charles Darwin, and the fiftieth anniversary of the publication of the *Origin of Species*, were held in Cambridge June 22 to 24, inclusive.

In addition to the brilliant social festivities, there was a presentation of addresses by delegates of universities, colleges, academies, and learned societies; an exhibition of portraits, books, and other objects of interest in connection with Darwin in the library of Christ's College, together with several important publications which afford lasting souvenirs of the occasion.

The following extracts from addresses of delegates, as published in *Nature*, illustrate the profound effect that Darwin's work has exercised in the entire realm of science:

Professor Hertwig (Königliche Preussische Akademie der Wissenschaften) referred to the influence of Darwin's work upon German biology, particularly at Jena. It was through Hæckel, who hailed Darwinism with delight, and said that evolution was the key of man's destiny, that the theory became predominant in German science. It had been the starting point for all the researches of the younger men and had entered into the life of the German people. Earlier this year festivals in commemoration of Darwin's work were held in Hamburg, Munich, Frankfurt, and other towns in Germany. The celebration at Cambridge was the acme of these festivals, and would give an immense stimulus to the scientific work of the delegates privileged to be present at it. The influ-

ence of Cambridge upon Darwin was great and beneficial, and particular mention must be made of the encouragement received from Henslow. Three bright stars had appeared in the scientific firmament of the university, the last being Darwin and the two others Harvey and Newton.

Professor Metchnikoff (Institut Pasteur), in his address, referred to the debt which medical science owes to the theory of organic evolution founded by Darwin. Diseases undergo evolution in accordance with the Darwinian law, and the recognition of this fact led to the science of comparative pathology.

Sir Ray Lankester, K. C. B., F. R. S.—I think that the one thing about Charles Darwin which the large majority of British naturalists would wish to be to-day proclaimed, in the first place—with no doubtful or qualifying phrase—is that, in their judgment, after these fifty years of examination and testing, his "theory of the origin of species by means of natural selection or the preservation of favored races in the struggle for life" remains whole and sound and convincing, in spite of the every attempt to upset it.

In proposing a toast to the memory of Darwin, Mr. Balfour said:

Charles Darwin's performances have now become part of the common intellectual inheritance of every man of education wherever he lives or whatever his occupation or trade in life. To him we trace in the main the view which has affected not merely our ideas of the development of living organisms but our ideas upon politics, upon sociology, ideas which cover the whole domain of human terrestrial activity. He is the fount and origin, and he will stand for all time as the man who has made this great and, as I think, beneficent revolution in the mode in which educated men can see the history, not merely of their own institutions, not merely of their own race, but of everything which has that unexplained attribute of life, everything that lives on the surface of the globe or within the depths of the ocean. He is the Newton of this great department of human research, and to him we look, as we looked to Newton to measure out heavens or to weigh suns and their attendant planets.

Mr. Balfour was followed by Professor Arrhenius (Nobelkommission für Physik), who characterized Darwin's contribution to the general progress of philosophical thought as follows:

Evolutional ideas are as old as human civilization. We find traces of them in old Egyptian legends of the growth of mankind, in Hindu myths, as well as in the cosmogony of Herod and in Ovid's *Metamorphoses*. During the lapse of centuries they were developed by philosophers and astronomers, that is, by the men of the oldest sciences; and in the eighteenth century, when most modern sciences took a distinct shape, those ideas formed important parts of the scientific work of Kant, and still more in the admirable theoretical speculations of Lamarck. But still the finalist school, founded on primitive and mediæval considerations, was in the highest degree preponderant; and the leading biologist at the end of that century, Cuvier, had no conception of evolutionism. Even in Kant's works we find the finalistic ideas prevailing.

To accomplish the now prevailing evolutionary ideas a great work was necessary in order that these should be developed into a system embracing all the biological sciences with the strictest logic and severest criticism. The attempts made at the beginning of the nineteenth century by many scientific men, among whom the name of Charles Darwin's grandfather, Erasmus Darwin, may be recalled, were far from sufficient. The epoch-making work was delivered by Charles Darwin, who, with an unrivaled patience and diligence as well as a rare impar-

tiality during nearly thirty years; collected and sifted the enormous material upon which is based his masterly work "The Origin of Species."

It must be said that the time was ripe for the triumph of the conception of evolution, as is clearly indicated by the simultaneous work of Wallace on biology and by the publication of Herbert Spencer's philosophical investigations. Charles Darwin was also immediately followed by enthusiastic and prominent adherers, such as Huxley and Hæckel, who propagated and worked out the new doctrines.

This rapid success also caused a strong reaction from the side of the representatives of the old finalistic ideas, grown strong through centuries. The battle fought between the two parties carried the new ideas into common life, far from the men of science and the philosophers' study. During the last decade of his life Darwin had the good fortune to see his ideas brought to definite victory and generally accepted, not only in the vast domain of biology, which has been spoken of so eloquently this morning, but even by scientific men in general, and by the enlightened public opinion. * * * Nowadays there is hardly a science which has not been affected and in many cases thoroughly permeated by it. The sociological and statistical sciences now rest on an evolutionary basis; history, and especially the history of culture, has found through it new lines of development; the linguist tries to find the natural laws of development of languages; the lawyer sees the legislative work of past generations and foresees their future modifications from the standpoint of evolution; the criminalist seeks the sources of crime in the influence of heredity and environment; and even the theologian, who for so long a time rejected the new ideas, finds now in them essential points of high ethical charm which he seeks to reconcile with true religion.

The published souvenirs of this remarkable occasion are thus characterized by Nature:

Darwin and Modern Science. Essays in Commemoration of the Centenary of the Birth of Charles Darwin and of the Fiftieth Anniversary of the Publication of the Origin of Species. Edited for the Cambridge Philosophical Society and the Syndics of the University Press by Prof. A. C. Seward, F. R. S.

Perhaps the most remarkable of the publications is the beautifully printed volume issued by the Cambridge University Press under the title of "The Foundations of the Origin of Species." This contains the brief abstract of the theory of natural selection written by Charles Darwin in June, 1842, sixteen years before the famous meeting of the Linnean Society at which the theory was first made known to the scientific world. The MS. of 1842, which was afterwards expanded by its author into the essay of 1844, consists of 35 pages written in pencil. It had been "hidden in a cupboard under the stairs, and only came to light in 1896, when the house at Down was vacated." It was, as the editor says, evidently written rapidly, and is in Darwin's most elliptical style, with much erasure and correction, the whole being "more like hasty memoranda of what was clear to himself than material for the convincing of others." Mr. Francis Darwin has laid the scientific public under an immense obligation by his admirable introduction and notes and by the care he has taken that readers should be able to study the sketch exactly as it stood in its original form. * * *

In addition to this work, a second volume, admirably printed by the University Press, was put into the hands of the guests at the commemoration. This production, which is purchasable by the public at the price of 2 shillings and 6

pence, is entitled "Order of the Proceedings at the Darwin Celebration held at Cambridge, June 22-24, 1909; with a Sketch of Darwin's Life * * *."

The Rede lecture on "Charles Darwin as Geologist," delivered by Sir Archibald Geikie, K. C. B., on June 24, has been published also by the University Press, with notes, at the price of 2 shillings net. Reference was first made in the lecture to the early geological interests of Darwin and the formative influence of Lyell upon his mind. The first volume of Lyell's *Principles of Geology* was published early in 1830. Darwin took the book with him on his voyage in the *Beagle* and studied it, with a result that changed his opinions and began the lifelong indebtedness to Lyell which he so sincerely felt and never ceased to express. In four distinct departments Darwin enriched the science of geology with new material during the voyage of the *Beagle*. First, he added to our knowledge of the volcanic history of the globe. Secondly, he brought forward a body of striking evidence as to the upward and downward movements of the terrestrial crust, and drew from this evidence some of the most impressive deductions to be found in the whole range of geological literature. In the third place, he made important observations on the geology of South America; and, finally, he furnished new and interesting illustrations of the potent part taken by the denuding agents of nature in effecting the decay and disintegration of the land.^a

Among the delegates to this centenary upon whom the degree of doctor of science was conferred, *honoris causa*, were the following Americans: Jacques Loeb, professor of physiology in the University of California; Charles Doolittle Walcott, Secretary of the Smithsonian Institution, Washington; and Edmund Beecher Wilson, professor of zoology in the Columbia University, New York.

TERCENTENARY OF THE UNIVERSITY OF OVIEDO.

The University of Oviedo, in Spain, celebrated its tercentenary in September, 1908, and delegates were present from many other universities both in Europe and America, in response to cordial invitations sent out early in the year. Perhaps more interesting to American students than all the formal addresses by the delegates and acknowledgments by the university authorities, is a letter from the rector of the University of Oviedo to the rector of the University of Habana, which appeared in the *Revista de la Facultad de Letras y Ciencias* for January, 1909, a periodical published by that university, expressing his gratification in almost pathetic terms at the participation of the University of Habana in the ceremonies at the old institution. He says:

Many and great, and perhaps unmerited, have been the testimonials of regard and esteem which this university has just received on the occasion of its tercentenary. It was flattered by the respect shown it by the North American universities, and cheered by the gallant cooperation of the French, while its pride was flattered by the presence of delegates from the aristocratic univer-

^a See *Nature*, 1909, June 24, p. 481; July 1, pp. 7-14.

sities of England; but none of these attentions aroused feelings in our hearts comparable to the deep, lively, and enthusiastic sentiment of affectionate regard which was excited by the presence of a delegate from the University of Habana, not only in ourselves at the university, but in all Spain—witness the warm greetings and applause which welcomed him everywhere. If the homage of Europe and Saxon America was most gratifying to us, that of beloved Cuba touched our hearts. Cuba, the first land of the new world which Spain caused to rise from an unknown sea, and the last which she lost, is for us a favorite daughter, never forgotten but always in our thoughts and always beloved. Therefore it is not strange that when so many distinguished universities were represented here, including the oldest in Europe, as the universities of Paris, Bologna, Oxford, and Cambridge, besides Harvard and Columbia in the United States, and Toulouse, Zurich, and many others, we saw and heard with most interest, and our heartiest applause went out to the delegate from the university which is our beloved daughter, another alma mater in Cuba. * * * Your university has a historical mission to fulfill, that of maintaining the language which Columbus brought to Cuba and of diffusing Spanish culture, a task in which we desire to give our assistance by sending to you when possible our professors, who will convey to you with their sonorous language of Castile the love of this old Spanish land, your mother, and especially of the Asturias, a region which has always been closely bound by ties of blood to the greater Antilles. And you will come here in return to teach us science and bring to us the breezes and the affection of the beloved isle.

The report of his mission to Oviedo by the delegate from the University of Habana, Dr. Juan M. Dihigo, published in the same number of the *Revista* above referred to, affords material from which the following notes are taken. They indicate the important position the University of Oviedo occupies in the intellectual world of Spain and its activity in diffusing knowledge among the people. Doctor Dihigo mentions particularly the patriotic and meritorious work of the university, which ought to be seconded, he adds, by the other similar institutions of Spain in influencing the social life of the public whenever possible. This it accomplishes by means of school colonies; scientific excursions to the biological station at Santander, to study the methods there; and university extension, following the English example, and in some cases, according to the Oxford delegate, Mr. E. Armstrong, with better results than were experienced in England. The lectures of the learned Prof. Rafael Altamira of the university in the Atheneum of Madrid upon contemporary history are especially mentioned as part of university extension work for their scope and influence. Doctor Dihigo speaks of the particular attentions paid the University of Habana through its delegate, he being assigned the principal place among the delegates from the universities of Oxford, Cambridge, Montpellier, Toulouse, the Sorbonne, Montevideo, Harvard, and Columbia.

The university, it appears, has been engaged in extension work for over seven years, the aim being not so much to provide courses of lectures, as to teach the uninstructed people directly, and so in part

supply the want which is expressed in the present cry in Spain, "fewer universities and more trade schools." But the university, while yielding to this demand, by teaching arithmetic, drawing, geometry, etc., to classes in various towns, has also preserved its true function by raising the intellectual and moral level of the students of these practical subjects through a system of general culture.

Doctor Dihigo makes particular mention of the practical school of legal and social studies, which he says is modeled upon German seminaries and the *École Pratique des Hautes Études de Paris*. The school is divided into three sections, one of politics and sociology, one of international questions, and the third of the history of law.

After describing briefly the library of the university, with its rare books, and the architecture of ancient ecclesiastical buildings in the neighborhood, some of which are survivals from the fourteenth and even the twelfth century, all situated in the most charming of natural scenery, Doctor Dihigo sums up his impressions by quoting from M. Gaston Bonnier, delegate from the Sorbonne, who closed his description of the whole occasion as follows:

Incomplete as the University of Oviedo appears in some respects, it is in reality one of the most active in Spain, being a center from whence intellectual influence is diffused, and while its field of education proper extends through the north of Spain, its influence makes itself felt throughout the whole country. In this anniversary of Oviedo may be seen an illustration of the general aspiration of the country toward intellectual renaissance. It is no longer the Spain of the fandango, the bull fight, and the castanet, but the Spain of the Iglesias, the Peredas, Pérez Galdós, Rusiñol y Quintero in letters, and of Ramón y Cajal, Bolívar, Menéndez y Pelayo in science—the modern Spain, which is preparing to issue from its long-continued apparent obscurity to demand its proper position in the clear light of human progress.

An abstract of an article by M. Georges Radet, published in the *Revue Internationale de l'Enseignement* for November 15, 1908, gives a sketchy account of the anniversary at Oviedo which supplements the foregoing. The founder of the university, this author begins, whose statue was unveiled at the tercentenary with fitting ceremonies, was Fernando Valdés, a prince of the church, an archbishop, and a grand inquisitor, and yet the university which was held at the baptismal font by one of the heirs of Torquemada has now become one of the most intelligent leaders in the advance guard of social progress.

After describing in a few words the imposing mountain scenery of the Asturias, which, however, he says is marred by the intrusion of mines and smelters, a contrast which offends the sense of fitness of the spectator, as when, raising his eyes to the arches of the ancient basilica in the sacred gorge of Covadonga, he sees buckets of manganese ore carried high above the sacred edifice upon an endless cable, the author continues:

The Asturian is at once, like his country, idealistic and practical. He seeks riches, but he knows how to make a good use of his wealth. Many Asturians

have become millionaires in Cuba and elsewhere and have endowed schools in their native villages, or museums and charitable institutions. Money is not everything for the Asturian. So with the Asturian University of Oviedo. It is also idealistic and practical and has added a labor of social reform to its intellectual mission. It has had great literary renown in the past and its graduates have held eminent places among the national masters of Spanish. Starting at Oviedo the university extension movement has successively included all the important centers of the Asturias, reaching as far even as Santander and Bilbao. It consists in public lectures, in popular courses for regularly matriculated auditors, and scientific excursions. It is designed principally for workmen and its efforts among them have been most fruitful. The expenses of this movement are met by voluntary contributions, and the treasury is never empty, and for two reasons. In the first place the promoters of this enterprise, the rector of the university and his colleagues, are not merely savants but apostles as well, disinterestedly devoted to their work and inspired by the faith which can remove mountains. Secondly, the University of Oviedo is a true regional plant with its roots in its native soil from which it derives its nourishment. Hence it rallies about it all the living forces of the country. It is the central link of a chain which extends from the grand seigneur to the humblest laborer or miner, or tradesman or soldier. It was therefore with legitimate pride that it called upon foreign universities to share in celebrating its anniversary. Bordeaux responded with ardor to the invitation, and in the address of its delegate recalled that friendly relations had existed between the Asturias and La Guyenne since the earliest times. In the days of the Roman conquest the Aquitainians sought leaders among the mountains of the Asturias. This ancient alliance of the times of Cæsar and Augustus has now to be renewed in a happier time and under intellectual instead of military auspices.

ANNIVERSARIES OF THE UNIVERSITIES OF LEIPZIG AND GENEVA.

The University of Leipzig, Germany, the only university in the Kingdom of Saxony, celebrated the five hundredth anniversary of its establishment in August, 1909. The occasion was a most interesting one, since Leipzig was one of the first German universities founded without the sanction of the Pope, and the second oldest institution of its kind on German soil. Its origin was due to the departure of 400 German professors and students from Prague on December 4, 1409, where they had come into conflict with their Bohemian colleagues. The Prince Elector Moritz of Saxony acted as patron of the new institution. Leipzig is to-day the third of the 21 German universities in number of students, Berlin having 14,203 matriculated students, Munich 6,304, and Leipzig 4,630.

A number of honorary degrees were bestowed upon learned men of Germany and foreign countries, Austria-Hungary receiving seven, the United States five. Ex-President Theodore Roosevelt was one of the five Americans, and the document conferring the degree characterizes him as follows: "Ready for war, courageous, yet a promoter of peace; a man endowed with all statesmanlike qualities; an honor to the civic crown; one with ever-ready sympathy and understanding

of the German spirit—Ex-President of the United States, Theodore Roosevelt.” The other four Americans honored were Professor Wilson, the biologist and Professor Burgess, the publicist, both of Columbia; Professor Michelson, the physicist, of Chicago; and Professor Loeb, the physiologist, of the University of California.

The anniversary festivities lasted several days, and consisted, among other things, of a procession through the city of students and citizens dressed in costumes of the middle ages and later periods. Most renowned foreign universities had sent delegates to represent them at this memorable convocation. A committee of Americans who had studied at Leipzig had prepared a Latin address, and Prof. Williston Walker had been chosen to present it to the convocation. A memorial fund of \$350, collected by these former American students of Leipzig, was utilized in sending to the library of the Leipzig University certain back numbers of American scholarly journals.

The University of Geneva, Switzerland, celebrated during the summer of 1909 the three hundred and fiftieth anniversary of its establishment, and also of the introduction of Protestantism under Calvin. The exact date of the establishment of this famous seat of learning was June 5, 1559. The celebration gave rise to a very extensive discussion in the press of Calvin's influence as a reformer and that of the institution he founded.

EDUCATIONAL NOTES FROM CONSULAR REPORTS.

[These notes from consular reports, together with the introductory remarks in each case, are reprinted from the publications of the Department of Commerce and Labor.]

WOMEN IN GERMAN UNIVERSITIES.

Consul Thomas H. Norton, writing from Chemnitz, says that the question of admitting women to equal rights with men in the privileges of the German universities is still far from being generally settled. He adds:

The universities in Saxony and in the southern part of the Empire—Bavaria, Baden, and Wurttemberg—have all opened their doors to female students, and granted them all academic rights, matriculation, graduation, etc. Others admit them only as visitors to lectures, but refuse to them all other privileges. The University of Berlin has adopted a compromise, refusing matriculation to women, but allowing them to attend courses of study as visitors, and also, with the approval of their instructors, to present themselves as candidates for the examinations leading to the doctor's degree.

During the past winter the 21 German universities enrolled 320 matriculated women and 2,504 female visitors. There was an increase over the preceding winter of 35 matriculates and of 399 visitors. The matriculates were divided among the 8 universities, where they are allowed entrance, as follows: Munich 125, Heidelberg 65, Freiburg 53, Leipzig 36, Jena 20, Tübingen 9, Würzburg 8, Erlangen 4.

EXPORTATION OF BOOKS AND MAGAZINES FROM GERMANY.

Consul Robert J. Thompson, writing from Hanover, says that one of the highest evidences of a nation's intellectual and ethical standing among the people of the world is the foreign demand for its literature, for the results of its technical studies and scientific investigations. In connection with this fact he adduces the following figures on the foreign book trade of Germany:

While the German trade statistics in this particular respect are incomplete, nevertheless the estimate of 42,012,520 books sent by German publishers to foreign countries in 1907 is fairly figured out.

The statistics show that 12,731,100 kilos (kilo = 2.2 pounds) were exported from the German market, 5,946,300 of which went to Austria-Hungary, 1,755,200 to Switzerland, 1,055,700 to European Russia, 1,007,900 to the United States, 639,600 to France, 527,500 to the Netherlands, 384,100 to England, 206,200 to Belgium, 204,400 to Sweden, 171,400 to Denmark, and 1,713 to Italy. To these figures 50 per cent more is added as having gone through the mails and included in the trade statistics mentioned. There was thus in all 19,096,650 kilos, or 42,100,475 pounds, of books sent abroad. The valuation of this branch of German export is placed at 75,000,000 marks (\$17,850,000), and the number of separate volumes, figured at an average of 1 pound each, at 42,100,475.

GERMAN HYGIENIC PROGRESS.

Consul-General Richard Guenther reports that a "Trade Hygienic Institute" is to be established in Frankfort, where all matters appertaining to the health and protection of German factory operatives and the working classes in general are to be studied and taught. He continues:

This institution will be the first of its kind and will have a highly important mission and a great field in which to work. Frankfort has been chosen on account of its being in close proximity to some of the great chemical factories, technical high schools and universities, and the many economic and social-scientific associations abounding in this city and vicinity. The "Institute for Communal Advancement" in Frankfort, aided by contributions from prominent manufacturers, has raised 100,000 marks (\$23,800) as an endowment for this "Trade Hygienic Institute."

All the data concerning experiments and experience of physicians and others employed or interested in the care for the working classes, also all reports emanating from official trade inspections, of labor associations, etc., is to be collected by this new institute, where they will be examined by experts and put to good use. Extensive laboratories fitted up with the best of modern appliances will be erected. This enterprise has its source in the belief held by its organization that a central point for this kind of science will greatly benefit the chemical and other industries, and especially the working classes connected therewith.

NOVEL PLAN TO INSTRUCT GERMAN PEASANTRY.

The following information concerning a free traveling country exposition now being introduced in Saxony is furnished by Consul Carl Bailey Hurst, of Plauen:

A novel plan is now being put into execution in this particular district in Saxony to enable the peasantry living at a distance from the educational

advantages of the cities to become acquainted with certain phases of modern art and literature. Due to the initiative of a citizen of Plauen, a free traveling exposition of moderate size has been organized, and several villages have been selected in which the exposition will be held, with the help, in particular, of the local clergy and public-school teachers.

Books of interesting and elevating character, principally by German authors, cheaply and artistically printed, are displayed. There are also copies of very cheap editions that visitors may buy if they feel so inclined. Much attention is paid to books for children, and entertaining stories, popular biographies, and histories are offered at prices within reach of all, in the hope that they will take the place of detective stories and the like, which are found everywhere.

The living room of the peasant's home is rarely decorated with an artistic picture, and as such can now be bought in this country for a very low price in the form of colored prints of real merit, a section of the exposition is devoted to the display of attractive pictures of this class.

LACE EXHIBITION.

Included in the exposition is a collection of laces and embroideries. As is well known, this part of Saxony is largely engaged in the production of such articles. Many women and girls learn the different parts of the hand work on machine-made lace, and others devote themselves altogether to hand-made pillow laces. With this in view, the art school of this city has loaned to the exposition a representative line of artistic laces, showing various stitches that can be learned without great difficulty, even by inexperienced hands. Those who may wish to copy the stitches or designs can get the use of the different pieces. Also, several very old specimens of Saxon lace have been given provisionally by the local art school.

Although this peculiar exposition of art and literature is just starting on its travels in the remote rural districts, sufficient interest has already been shown by the people for whom it is primarily designed to encourage the supporters of the philanthropic enterprise to further efforts.

NUMBER OF STUDENTS IN EUROPEAN UNIVERSITIES.

In stating that in 1907 there were in Europe 125 universities, which were visited by 228,732 students, Vice-Consul James L. A. Burrell, of Magdeburg, sends the following details:

Of these the university at Berlin had the largest number of students, viz., 13,884; next came Paris with 12,985, Budapest with 6,551, and Vienna with 6,205. The list by country follows:

Country.	No. of universities.	Students.	Country.	No. of universities.	Students.
Germany.....	21	49,000	Spain.....	9	12,000
France.....	16	32,000	Switzerland.....	7	6,500
Austria-Hungary.....	11	30,000	Belgium.....	4	5,000
England.....	15	25,000	Sweden.....	3	5,000
Italy.....	21	24,000	Roumania.....	2	5,000
Russia.....	9	23,000	Holland.....	5	4,000

The smaller countries—Greece, Norway, Portugal, Denmark, Bulgaria, and Servia—have each one university.

GERMAN HIGH SCHOOL FOR CHINESE.

According to the London and China Telegraph at a meeting in Berlin on December 4, 1908, of the executive committee of the German Colonial Society, under the presidency of Duke John Albert of Mecklenburg, Admiral von Tirpitz, secretary of the navy department, announced that the Government intended to establish at Kiaochow a high school for Chinese youth, at a cost of \$150,000, with a recurrent expenditure of \$37,000 per annum. The minister stated that the view prevailed in China that a thorough reform of the school system was a necessary preliminary to the modernization of the State's methods of government. The Chinese Government had shown its sympathy with the project by expressing its readiness to support the new school, both by a subsidy and by the provision of suitable scholars, and also by admitting scholars from the German school to state examinations and to posts under the Chinese Government.

The German Government, Admiral von Tirpitz added, desired to create a commercial high school as a basis for technical and medical schools and for institutes for political economy, forestry, and agriculture, to be founded later.

COMPILATION OF A NEW TECHNICAL DICTIONARY.

Consul-General Richard Guenther, of Frankfort, notes that at the annual meeting of the Association of German Engineers, lately held at Dresden, announcement was made that the great work of compiling and publishing the new technical dictionary, which was conducted under the auspices of the association, had to be stopped, because it was found that the expenses would amount to more than four times the estimates. Mr. Guenther adds:

The great progress in science and industries had created a vast mass of new terms and matter largely in excess of what had been estimated at the beginning. This stoppage is to be greatly regretted, as the want of a new technical dictionary and encyclopedia is acutely felt by thousands of persons engaged in scientific research, in all lines of commerce and production, in literature, journalism, and in the administration of state and municipal government.

It is, however, satisfactory to note that the executive board of the Association of German Engineers has made strenuous efforts to take up and complete this valuable work, and has succeeded in obtaining therefor the aid of the Federal Government of Germany and of the Ministry of Education of the Prussian Kingdom.

NATIONAL CHEMICAL LABORATORY PLANNED IN GERMANY.

Consul-General Richard Guenther, of Frankfort, advises that an association has been formed in Germany for the purpose of establishing a national chemical laboratory. A fund of 1,000,000 marks (\$238,000) is to be raised for erecting a suitable building with the requisite equipment. The board of directors of the association is requesting the Federal Government to support the new institution by an annual subvention of 100,000 marks (\$23,800). The state government of Prussia has tendered a site for the building free of cost. Germany being foremost among nations in chemical and medical science, the new laboratory will no doubt become renowned and of great practical value, attracting students from all parts of the world.

ENCOURAGEMENT OF FAMILY GARDENING.

Consul-General Richard Guenther reports that to encourage gardening among the working classes the city authorities of Frankfort leased at a very low rent small tracts of land belonging to the city. Altogether there are about 36 acres of municipal land let out for that purpose, divided among 258 different parties and to the association for promoting gardening on a small scale. Besides this, a tract of about 4 acres of municipal land has been let for the same purpose to the employees of the city's tramways and electric works. The city will devote additional land for small gardening as the demand and utility for such will increase. These little gardens are a great source of contentment to the leaseholders and their women and children, who take much interest in working and planting therein. This system is also in vogue in Berlin and other German cities.

GERMAN STUDENT INSURANCE.

Consul Herman L. Spahr reports the University of Breslau has made a contract with an accident insurance company in Frankfort to insure its students on the following plan:

All students of mathematics, astronomy, physics, chemistry or pharmacy, botany, zoology, mineralogy, and geology must pay a fee of $1\frac{1}{2}$ marks (36 cents) each semester and be insured against accident occurring in the line of duty. Firemen and machinists and employees of the clinics are also included, the first two paying 5 marks (\$1.19) and the last 3 marks (71 cents) premium. The policy lapses so soon as the holder's connection with the university is severed. The company pays 3,000 marks (\$714) in case of death, 15,000 marks (\$3,570), payable in annuities, for total disability, correspondingly smaller amounts for partial disability, and 3 marks a day (not exceeding one year) if cured. This insurance is optional with students of the other branches and begins with the day on which they pay $1\frac{1}{2}$ marks for the semester.

CHAPTER XIV.

LIST OF COLLEGE AND STUDENT PERIODICALS CURRENTLY RECEIVED BY THE LIBRARIES IN THE DISTRICT OF COLUMBIA.....	551

ABBREVIATIONS.

Agr-----	Department of Agriculture.	ir-----	irregular.
Ed-----	Bureau of Education.	m-----	monthly.
LC-----	Library of Congress.	q-----	quarterly.
PL-----	D. C. Public Library.	sm-----	semimonthly.
bm-----	bimonthly.	sw-----	semiweekly.
bw-----	biweekly.	w-----	weekly.
d-----	daily.		

- Abbey student. Atchison, Kan. bm. (St. Benedict's college)-----Ed.
 Abbotsholmian. Abbotsholme, Eng. 3 times a year. (The New school)---Ed.
 Agricultural college extension bulletin. Columbus, O. m. (Ohio state university)-----Ed.
 Agricultural student. Columbus, O. m. (Ohio state university)-----Agr.
 Agricultural students' gazette. Cirencester, Eng. 3 times a year. (Royal agricultural college)-----Ed. Agr.
 Agriculture. Lincoln, Neb. m. (University of Nebraska)-----Agr.
 Alton high school, Alton, Ill. See Piasa quill.
 Alumni quarterly. Urbana, Ill. q. (University of Illinois)-----Ed.
 Alumni report. Philadelphia. m. (Philadelphia college of pharmacy)---Ed.
 American academy of medicine bulletin. Easton, Pa. bm. (American academy of medicine)-----Ed.
 American annals of the deaf. Washington, D. C. bm. (Gallaudet college)---Ed.
 American university courier. Washington, D. C. q. (American University)-----Ed.
 Association seminar. Springfield, Mass. m. (International Y. M. C. A. training school)-----Ed.
 Berea quarterly. Berea, Ky. q. (Berea college)-----Ed.
 Boone review. Wuchang, China. q. (Boone college)-----Ed.
 Bostonia. Boston. q. (Boston university)-----Ed.
 Bowdoin orient. Brunswick, Me. w. (Bowdoin college)-----LC.
 Brown alumni monthly. Providence, R. I. m. (Brown university)---Ed. LC.
 Brown and white. South Bethlehem, Pa. sw. (Lehigh university)-----LC.
 Brown university, Providence, R. I. See Brown alumni monthly.
 Bryn Mawr alumni quarterly. Philadelphia. q. (Bryn Mawr college)----LC.
 Bryn Mawr college, Bryn Mawr, Pa. See Bryn Mawr alumni quarterly;
 Tipyn o'Bob.
 Buff and blue. Washington, D. C. m. (Gallaudet college)-----Ed. LC.

- California. University. Berkeley. *See* University of California chronicle.
 Cambridge university reporter. Cambridge, Eng. w. (University of
 Cambridge)-----Ed.
 Carlisle arrow. Carlisle, Pa. w. (U. S. Indian school)-----Ed. LC.
 Catholic university bulletin. Washington, D. C. q. (Catholic univer-
 sity of America)-----Ed.
 Chautauqua quarterly. Chautauqua, N. Y. q. (Chautauqua institution)---Ed.
 Chicago. University. *See* Daily maroon; University of Chicago magazine.
 Chinese students' monthly. Ashburnham, Mass. m. (Chinese students'
 alliance of eastern states, U. S. A.)-----Ed.
 Cirencester, Eng. Royal agricultural college. *See* Agricultural students'
 gazette.
 Clark college record. Worcester, Mass. q. (Clark university)-----Ed.
 Clarkson bulletin. Potsdam, N. Y. q. (Thomas S. Clarkson memorial
 school of technology)-----Ed.
 Colgate Madisonensis. Hamilton, N. Y. sm. (Colgate university)---Ed. LC.
 College chips. Decorah, Ia. m. (Luther college)-----LC.
 College signal. Amherst, Mass. bw. (Massachusetts agricultural col-
 lege)-----LC.
 College student. Lancaster, Pa. m. (Franklin and Marshall college)---Ed.
 Columbia monthly. New York. m. (Columbia university)-----Ed. LC.
 Columbia spectator. New York. d. (Columbia university)-----Ed.
 Columbia university. New York. *See* Columbia monthly; Columbia
 spectator; Columbia university quarterly; Teachers college record.
 Columbia university quarterly. New York. q. (Columbia university)---Ed. LC.
 Connecticut agricultural college, Storrs. *See* Lookout.
 Cook academy, Montour Falls, N. Y. *See* Walking leaf.
 Cornell alumni news. Ithaca, N. Y. w. (Cornell university)-----Ed. LC.
 Cornell countryman. Ithaca, N. Y. m. (Cornell university. College
 of agriculture)-----LC. Agr.
 Cornell daily sun. Ithaca, N. Y. d. (Cornell university)-----LC.
 Cornell rural school leaflet. Ithaca, N. Y. m. (Cornell university.
 College of agriculture)-----Ed. Agr.
 Daily maroon. Chicago. d. (University of Chicago)-----LC.
 Daily Nebraskan. Lincoln, Neb. d. (University of Nebraska)-----LC.
 Daily Palo Alto. Stanford University, Cal. d. (Leland Stanford junior
 university)-----LC.
 Daily Princetonian. Princeton, N. J. d. (Princeton university)-----LC.
 Dartmouth magazine. Hanover, N. H. m. (Dartmouth college)-----Ed. LC.
 Demeter. Baton Rouge, La. m. (Louisiana state university and agri-
 cultural and mechanical college)-----Agr.
 Eastern Kentucky review. Richmond, Ky. q. (Kentucky state normal
 school)-----Ed.
 Emerson college magazine. Boston. m. (Emerson college)-----LC.
 Fordham monthly. Fordham, N. Y. m. (St. John's college)-----LC.
 Franklin and Marshall college, Lancaster, Pa. *See* College student.
 Gallaudet college, Washington, D. C. *See* American annals of the deaf;
 Buff and blue.
 George Washington university, Washington, D. C. *See* University hatchet.
 Georgetown college journal. Washington, D. C. m. (Georgetown uni-
 versity)-----Ed. LC. PL.
 Graduate magazine. Lawrence, Kan. m. (University of Kansas)-----LC.

- Hamilton literary magazine. Clinton, N. Y. m. (Hamilton college)-----LC.
 Harvard advocate. Cambridge, Mass. bw. (Harvard university)-----LC.
 Harvard bulletin. Boston. w. (Harvard university)-----Ed.
 Harvard graduates' magazine. Boston. q. (Harvard university)----Ed. LC.
 Harvard illustrated magazine. Cambridge, Mass. m. (Harvard university)-----LC.
 Harvard lampoon. Cambridge, Mass. bw. (Harvard university)-----LC.
 Harvard university gazette. Cambridge, Mass. w. (Harvard university)---LC.
 Haverfordian. Haverford, Pa. m. (Haverford college)-----LC.
 Idaho student farmer. Moscow, Id. m. (University of Idaho)-----Agr.
 Illini. Urbana, Ill. d. (University of Illinois)-----LC.
 Illinois agriculturist. Urbana, Ill. m. (University of Illinois)-----Agr.
 Illinois state normal university, Normal, Ill. *See* Normal school quarterly.
 Illinois. University. Urbana. *See* Alumni quarterly; Illini; Illinois agriculturist.
 Indian craftsman. Carlisle, Pa. m. (U. S. Indian school)-----Ed.
 Indian school journal. Chilocco, Okla. m. (U. S. Indian school)-----Ed.
 Industrialist. Manhattan, Kan. w. (Kansas state agricultural college)-----Ed. Agr.
 Intercollegian. New York. m. (Y. M. C. A. International committee. Student department)-----Ed. LC.
 International Y. M. C. A. training school. *See* Association seminar.
 Iowa agriculturist. Ames, Ia. m. (Iowa state college of agriculture and mechanic arts)-----Agr.
 Iowa alumnus. Iowa City, Ia. m. (University of Iowa)-----Ed.
 Iowa state college of agriculture and mechanic arts, Ames. *See* Iowa agriculturist.
 Iowa. University. Iowa City. *See* Iowa alumnus.
 Johns Hopkins university circular. Baltimore, Md. m. (Johns Hopkins university)-----Ed. LC.
 Kansas state agricultural college. Manhattan. *See* Industrialist.
 Kansas. University. Lawrence. *See* Graduate magazine.
 Kentucky state normal school, Richmond. *See* Eastern Kentucky review.
 Latine. Oak Park, Ill. m. (Oak Park high school)-----Ed.
 Lehigh university, South Bethlehem, Pa. *See* Brown and white.
 Leland Stanford junior university, Stanford University, Cal. *See* Daily Palo Alto; Stanford alumnus.
 London university gazette. London. w. (London university)-----Ed.
 Lookout. Storrs, Ct. m. (Connecticut agricultural college)-----LC. Agr.
 Louisiana state university and agricultural and mechanical college, Baton Rouge. *See* Demeter.
 Luther college, Decorah, Ia. *See* College chips.
 McGill university, Montreal. *See* University magazine.
 Madison, Wis. College of agriculture. *See* Student farmer.
 Maryland agricultural college quarterly. College Park, Md. q. (Maryland agricultural college)-----Agr.
 Maryland. University. Baltimore. *See* Old Maryland.
 Massachusetts agricultural college, Amherst. *See* College signal.
 Massachusetts institute of technology, Boston. *See* Tech; Technology review.
 Michigan alumnus. Ann Arbor, Mich. m. (University of Michigan)---Ed. LC.

- Michigan daily. Ann Arbor, Mich. d. (University of Michigan)-----LC.
 Michigan mirror. Flint, Mich. sm. (Michigan school for the deaf)-----LC.
 Michigan state normal school, Ypsilanti. *See* Normal college news.
 Michigan. University. Ann Arbor. *See* Michigan alumnus; Michigan daily; University of Michigan news-letter.
 Minnesota alumni weekly. Minneapolis. w. (University of Minnesota)---Ed. LC.
 Minnesota farm review. St. Anthony Park, Minn. m. (Minnesota school of agriculture)-----Agr.
 Minnesota. University. Minneapolis. *See* Minnesota alumni weekly.
 Missouri agricultural college farmer. Columbia, Mo. m. (University of Missouri)-----Agr.
 Missouri alumni quarterly. Columbia, Mo. q. (University of Missouri)---LC.
 Missouri. University. Columbia. *See* Missouri agricultural college farmer; Missouri alumni quarterly; University of Missouri news letter.
 Mount Holyoke. South Hadley, Mass. m. (Mount Holyoke college)-----Ed.
 Nassau literary magazine. Princeton, N. J. m. (Princeton university)---LC.
 Nebraska. University. Lincoln. *See* Agriculture; Daily Nebraskan; University journal.
 New Jersey training school, Vineland. *See* Training school.
 New York state college of agriculture, Ithaca. *See* Cornell countryman; Cornell rural school leaflet.
 Niagara index. Niagara university, N. Y. sm. (Niagara university)-----Ed.
 Normal college magazine. Pretoria, South Africa. ir. (Normal college)---Ed.
 Normal college news. Ypsilanti, Mich. w. (Michigan state normal school)-----Ed.
 Normal school quarterly. Johnson, Vt. q. (Vermont state normal school)---Ed.
 Normal school quarterly. Normal, Ill. q. (Illinois state normal university)-----Ed.
 Normal seminar. Cheney, Wash. q. (Washington state normal school)---Ed.
 Oak Park, Ill. High school. *See* Latine.
 Oberlin alumni magazine. Oberlin, O. m. (Oberlin college)-----Ed.
 Oberlin review. Oberlin, O. w. (Oberlin college)-----LC.
 Ogontz mosaic. Ogontz, Pa. m. (Ogontz school for young ladies)-----LC.
 Ohio chronicle. Columbus, O. w. (Ohio institution for deaf and dumb)---Ed.
 Ohio state university, Columbus. *See* Agricultural college extension bulletin; Agricultural student; University news-bulletin.
 Old Maryland. Baltimore, Md. m. (University of Maryland)-----Ed. LC.
 Old Penn. Philadelphia. w. (University of Pennsylvania)-----Ed. LC.
 Oxford magazine. Oxford, Eng. w. (Oxford university)-----Ed.
 Park college record. Parkville, Mo. w. (Park college)-----Ed.
 Pennsylvania. University. Philadelphia. *See* Old Penn; Pennsylvanian; Punch bowl.
 Pennsylvanian. Philadelphia. d. (University of Pennsylvania)-----LC.
 Philadelphia college of pharmacy. *See* Alumni report.
 Piasa quill. Alton, Ill. m. (Alton high school)-----Ed.
 Preston school outlook. Waterman, Cal. m. (Preston school of industry)---Ed.
 Pretoria, South Africa. Normal college. *See* Normal college magazine.
 Princeton alumni weekly. Princeton, N. J. w. (Princeton university)---LC.
 Princeton tiger. Princeton, N. J. m. (Princeton university)-----LC.
 Princeton university, Princeton, N. J. *See* Daily Princetonian; Nassau literary magazine; Princeton alumni weekly; Princeton tiger.
 Punch bowl. Philadelphia. m. (University of Pennsylvania)-----LC.

- Purdue agriculturist. Lafayette, Ind. m. (Purdue university)-----Agr.
- Randman's reminder. Laramie, Wy. m. (University of Wyoming)-----Agr.
- St. Benedict's college, Atchison, Kan. *See* Abbey student.
- St. John's college, Fordham, N. Y. *See* Fordham monthly.
- Santee normal training school, Santee Agency, Neb. *See* Word carrier.
- Schofield school bulletin. Aiken, S. C. m. (Schofield normal and industrial school) -----Ed.
- Southern collegian. Lexington, Va. m. (Washington and Lee university)---LC.
- Southern letter. Tuskegee, Ala. m. (Tuskegee normal and industrial institute) -----Ed.
- Stanford alumnus. Stanford University, Cal. m. (Leland Stanford junior university)-----LC.
- Stevens institute indicator. Hoboken, N. J. q. (Stevens institute of technology) -----LC.
- Student farmer. Madison, Wis. m. (College of agriculture)-----Agr.
- Teachers college record. New York. bm. (Columbia university)---Ed. LC. PL.
- Tech. Boston. d. (Massachusetts institute of technology)-----LC.
- Technology review. Boston. q. (Massachusetts institute of technology)-----Ed. LC.
- Thomas S. Clarkson memorial school of technology. Potsdam, N. Y. *See* Clarkson bulletin.
- Tipyn o'Bob. Bryn Mawr, Pa. m. (Bryn Mawr college)-----LC.
- Toronto university. *See* University monthly.
- Training school. Vineland, N. J. m. (New Jersey training school)-----Ed.
- Trinity college record. Washington, D. C. q. (Trinity college)-----Ed. LC.
- Trinity tablet. Hartford, Ct. q. (Trinity college)-----LC.
- Tuskegee normal and industrial institute, Tuskegee, Ala. *See* Southern letter.
- United States Indian school, Carlisle, Pa. *See* Carlisle arrow; Indian craftsman.
- United States Indian school, Chilocco, Okla. *See* Indian school journal.
- University hatchet. Washington, D. C. w. (George Washington university)-----LC.
- University journal. Lincoln, Neb. m. (University of Nebraska)-----Ed.
- University magazine. Montreal. q. (McGill university, etc.)-----LC.
- University monthly. Toronto. m. (Toronto university)-----LC.
- University news-bulletin. Columbus, O. m. (Ohio state university)---Ed. LC.
- University of California chronicle. Berkeley, Cal. q. (University of California)-----Ed. LC.
- University of Chicago magazine. Chicago. m. (University of Chicago)---Ed. LC.
- University of Michigan news-letter. Ann Arbor, Mich. w. (University of Michigan)-----Ed. LC.
- University of Missouri news letter. Columbia, Mo. m. (University of Missouri)-----Ed.
- University of Virginia magazine. Charlottesville, Va. m. (University of Virginia)-----LC.
- Utah eagle. Ogden, Utah. m. (Utah school for the deaf and blind)---LC.
- Vermont state normal school, Johnson. *See* Normal school quarterly.
- Virginia. University. Charlottesville. *See* University of Virginia magazine.

Walking leaf. Montour Falls, N. Y. m. (Cook academy)-----	Ed. LC.
Washington and Lee university, Lexington, Va. <i>See</i> Southern collegian.	
Washington state normal school, Cheney. <i>See</i> Normal seminar.	
Washingtonian. Seattle, Wash. m. (University of Washington)-----	LC.
Washingtonian. Vancouver, Wash. sm. (Washington state school for the deaf and the blind)-----	Ed.
Wesleyan argus. Middletown, Ct. sw. (Wesleyan university)-----	LC.
Westminster college news letter. Fulton, Mo. bw. (Westminster col- lege)-----	Ed.
Westminster monthly. Fulton, Mo. m. (Westminster college)-----	LC.
Westonian. Westtown, Pa. m. (Westtown boarding school)-----	Ed.
William and Mary college quarterly. Williamsburg, Va. q. (William and Mary college)-----	Ed. LC.
William Woods college record. Fulton, Mo. m. (William Woods col- lege)-----	Ed.
Williams record. Williamstown, Mass. w. (Williams college)-----	Ed.
Wisconsin alumni magazine. Madison, Wis. m. (University of Wis- consin)-----	LC.
Word carrier. Santee Agency, Neb. bm. (Santee normal training school)-----	Ed.
Wyoming. University. Laramie. <i>See</i> Randman's reminder.	
Yale alumni weekly. New Haven, Ct. w. (Yale university)-----	Ed. LC.
Yale courant. New Haven, Ct. m. (Yale university)-----	LC.
Yale literary magazine. New Haven, Ct. m. (Yale university)-----	LC.
Yale news. New Haven, Ct. d. (Yale university)-----	LC.
Yale review. New Haven, Ct. q. (Yale university)-----	LC.
Y. M. C. A. International committee. Student department. <i>See</i> Inter- collegian.	

CHAPTER XV.

EDUCATIONAL DIRECTORY.^a

I.—CHIEF STATE SCHOOL OFFICERS.

Name.	Address.	Official designation.
H. C. Gunnels.....	Montgomery, Ala.....	State superintendent of education.
R. L. Long.....	Phoenix, Ariz.....	Territorial superintendent of public instruction.
George B. Cook.....	Little Rock, Ark.....	State superintendent of public instruction.
Edward Hyatt.....	Sacramento, Cal.....	Do.
Mrs. Katherine M. Cook.....	Denver, Colo.....	Do.
Charles D. Hine.....	Hartford, Conn.....	Secretary of state board of education.
Thomas C. Roe.....	Dover, Del.....	Do.
A. T. Stuart.....	Washington, D. C.....	Superintendent of District schools.
W. M. Holloway.....	Tallahassee, Fla.....	State superintendent of public instruction.
Jere M. Pound.....	Atlanta, Ga.....	State school commissioner.
S. Belle Chamberlain.....	Boise, Idaho.....	State superintendent of public instruction.
Francis G. Blair.....	Springfield, Ill.....	Do.
R. T. Aley.....	Indianapolis, Ind.....	Do.
John F. Riggs.....	Des Moines, Iowa.....	Do.
E. T. Fairchild.....	Topeka, Kans.....	Do.
J. G. Crabbe.....	Frankfort, Ky.....	Do.
T. H. Harris.....	Baton Rouge, La.....	State superintendent of public education.
Payson Smith.....	Augusta, Me.....	State superintendent of public schools.
M. Bates Stephens.....	Annapolis, Md.....	State superintendent of public education.
George H. Martin.....	Boston, Mass.....	Secretary of state board of education.
Luther L. Wright.....	Lansing, Mich.....	State superintendent of public instruction.
C. G. Schulz.....	St. Paul, Minn.....	Do.
J. N. Powers.....	Jackson, Miss.....	State superintendent of public education.
Howard A. Gass.....	Jefferson City, Mo.....	State superintendent of public schools.
W. E. Harmon.....	Helena, Mont.....	State superintendent of public instruction.
E. C. Bishop.....	Lincoln, Nebr.....	Do.
Orvis Ring.....	Carson, Nev.....	Do.
H. C. Morrison.....	Concord, N. H.....	Do.
Chas. J. Baxter.....	Trenton, N. J.....	Do.
J. E. Clark.....	Santa Fe, N. Mex.....	Territorial superintendent of public instruction.
Andrew S. Draper.....	Albany, N. Y.....	State commissioner of education.
J. Y. Joyner.....	Raleigh, N. C.....	State superintendent of public instruction.
W. L. Stockwell.....	Bismarck, N. Dak.....	Do.
John W. Zeller.....	Columbus, Ohio.....	State commissioner of common schools.
E. D. Cameron.....	Guthrie, Okla.....	State superintendent of public instruction.
J. H. Ackerman.....	Salem, Oreg.....	Do.
Nathan C. Schaeffer.....	Harrisburg, Pa.....	Do.
Walter E. Ranger.....	Providence, R. I.....	Commissioner of public schools.
J. E. Swearingen.....	Columbia, S. C.....	State superintendent of education.
H. A. Ustrud.....	Pierre, S. Dak.....	State superintendent of public instruction.
R. L. Jones.....	Nashville, Tenn.....	Do.
R. B. Cousins.....	Austin, Tex.....	Do.
A. C. Nelson.....	Salt Lake City, Utah.....	Do.
Mason S. Stone.....	Montpelier, Vt.....	State superintendent of education.
J. D. Eggleston, jr.....	Richmond, Va.....	State superintendent of public instruction.
Henry B. Dewey.....	Olympia, Wash.....	Do.
M. P. Shawkey.....	Charleston, W. Va.....	State superintendent of free schools.
C. P. Cary.....	Madison, Wis.....	State superintendent of public schools.
A. D. Cook.....	Cheyenne, Wyo.....	State superintendent of public instruction.
Walter E. Clark.....	Juneau, Alaska.....	Governor, and ex officio superintendent of education.
W. H. Babbitt.....	Honolulu, Hawaii.....	Superintendent of public instruction.
D. P. Barrows.....	Manila, P. I.....	Director of education.
E. G. Dexter.....	San Juan, P. R.....	Commissioner of education.

^a Corrected to November, 1909, in so far as changes have been reported to the bureau.

II.—CITY SUPERINTENDENTS.^a

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
ALABAMA.						
Anniston.....	9,695	David Rhodin Murphey....	1	July 1, 1909	\$1,800	Oct. —, 1898
Bessemer.....	6,358	Joseph M. Dill.....	(b)	(b)	(b)	
Birmingham.....	38,415	John Herbert Phillips.....	3	June 30, 1911	3,600	July —, 1883
Eufaula.....	4,532	Frank Lee McCoy.....	3	Dec. 31, 1911	1,800	—, 1895
Florence.....	6,478	James Bothwell Lookhart....	2	June 26, 1911	1,200	June 26, 1907
Gadsden.....	4,282	Walter Evans Striplin.....	2	June, 1911	2,000	Jan. —, 1903
Girard.....	8,068	Paul Keeton.....	1	June 1, 1909	800	June 10, 1908
Huntsville.....	35,469	Robert Ernest Sessions.....	1	May 28, 1909	1,500	May 25, 1908
Mobile.....	30,346	Samuel S. Murphy.....	4	Sept. 1, 1912	3,000	
Montgomery.....	4,437	Charles Lewis Floyd.....	2	June 30, 1909	2,500	July 1, 1889
New Decatur.....	4,245	William F. Jones.....	1	June 30, 1910	1,500	June 1, 1909
Opelika.....	4,163	Isaac William Hill.....	2	June 1, 1909	2,000	
Phoenix.....	3,485	Horace Greely Vandiver.....	1	June —, 1909	875	June —, 1908
Pratt City.....	8,713	Elmer O. Sanders.....	1	June 4, 1909	1,100	Mar. 1, 1908
Selma.....	5,056	Arthur Fort Harmon.....	1	June 30, 1910	2,100	July 1, 1908
Talladega.....	4,097	D. A. McNeill.....	(b)	(b)	(b)	
Troy.....	5,094	John P. Selman.....	3	—, 1911	1,500	—, 1900
Tuscaloosa.....	2,848	James Henry Foster.....	1	July 31, 1909	2,100	Sept. —, 1893
Woodlawn.....		Joseph Dean Williams.....	1	June 30, 1910	1,600	Sept. 10, 1907
ARIZONA.						
Bisbee.....		Charles F. Philbrook.....	1	July 31, 1910	2,700	Aug. —, 1904
Douglas.....	5,544	W. E. Lutz.....	2	Aug. 30, 1911	2,800	
Phoenix.....		John D. Loper.....	1	June 30, 1910	3,000	
Prescott.....		Warren Dwight Baker.....	1	June 15, 1909	1,900	Aug. 10, 1908
Tucson.....		Sidney Casleton Newsom.....	4	June 1, 1912	3,000	June 1, 1908
ARKANSAS.						
Fayetteville.....	4,061	Frank S. Root.....	1	June 1, 1909	1,000	
Fort Smith.....	11,587	James Wyse Kuykendall.....	1	June 30, 1910	2,640	June 15, 1905
Helena.....	5,550	Samuel Hamilton Spragins.....	1	June 1, 1910	1,800	Sept. —, 1901
Hot Springs.....	9,973	Frank Ward Miller.....	1	July 1, 1910	2,400	July 1, 1908
Jonesboro.....	4,508	D. T. Rogers.....	(b)	(b)	(b)	
Little Rock.....	38,307	Burr Walter Torreyson.....	2	June —, 1909	2,800	June —, 1905
Paragould.....	3,324	H. R. Partlow.....	1	May —, 1909	1,200	May —, 1907
Pine Bluff.....	11,496	Junius Jordon.....	1	May 31, 1908	2,000	
Texarkana.....	4,914	Edward A. Brennan.....	1	June 30, 1910	1,800	May 8, 1908
CALIFORNIA.						
Alameda.....	16,464	Will C. Wood.....	(b)	(b)	(b)	
Bakersfield.....	4,836	David Whitson Nelson.....	4	June 30, 1910	1,725	June 30, 1896
Berkeley.....	13,214	Frank F. Bunker.....	4	June 30, 1912	4,000	July 1, 1908
Eureka.....	7,827	Delmar L. Thornbury.....	(b)	(b)	(b)	
Fresno.....	12,470	Charles Laurie McLane.....	4	June 30, 1913	3,000	July —, 1899
Grass Valley.....	4,719	J. S. Hennessey.....	(b)	(b)	(b)	
Los Angeles.....	102,479	Ernest Carroll Moore.....	4	June —, 1910	5,000	June —, 1906
Napa.....	4,036	Lena Adella Jackson.....	4	Jan. —, 1910	1,600	June —, 1907
Oakland.....	66,960	John William McClymonds.....	4	Apr. 1, 1913	4,000	Apr. —, 1889
Pasadena.....	9,117	Arthur L. Hamilton.....	4	July 1, 1911	2,700	July 1, 1907
Petaluma.....	3,871	Eldredge Bachman Dykes.....	1	June 22, 1909	1,300	July 1, 1908
Pomona.....	5,526	Park W. Kauffman.....	4	July 1, 1910	2,400	
Redlands.....	4,797	Wayne P. Smith.....	1	July 1, 1909	2,400	June 3, 1908
Riverside.....	7,973	Arthur Newhall Wheelock.....	1	June 30, 1910	2,600	July 1, 1902
Sacramento.....	29,282	Oliver William Erlewine.....	4	Jan. 1, 1910	2,700	Feb. 1, 1894
San Bernardino.....	6,150	F. W. Conrad.....	(b)	(b)	(b)	
San Diego.....	17,700	Duncan MacKinnon.....	4	July 1, 1910	3,000	July 1, 1906
San Francisco.....	348,782	Alfred Roncivieri.....	4	Jan. —, 1911	4,000	Jan. —, 1906
San Jose.....	21,500	Alexander Sherriffs.....	4	—, 1910	2,500	July 1, 1906
San Rafael.....	3,879	Exune Morris Cox.....	4	July 1, 1912	2,400	July 1, 1908
Santa Ana.....	4,933	John A. Cranston.....	4	June 30, 1910	2,300	May —, 1908
Santa Barbara.....	6,587	H. A. Adrian.....	4	June 30, 1909	2,500	Jan. 1, 1904
Santa Clara.....	3,650	W. J. Hayward.....	2	July —, 1910	100	Jan. —, 1906
Santa Cruz.....	5,659	John William Linscott.....	1	June 30, 1909	2,400	Aug. 1, 1906
Santa Rosa.....	6,673	James Ephraim Williamson.....	1	do.....	2,200	July 6, 1908
Stockton.....	17,506	James A. Barr.....	4	Oct. 19, 1911	3,000	Oct. 19, 1891
Vallejo.....	7,965	Howard Ford.....	2	June 30, 1910	2,000	July 1, 1905
Watsonville.....	3,528	Thomas Smith MacQuiddy.....	1	June 30, 1910	1,900	Apr. 1, 1908
COLORADO.						
Boulder.....	6,150	William V. Casey.....	(b)	(b)	(b)	
Canon City.....	3,775	Frank F. Thompson.....	1	June 1, 1910	1,700	Apr. —, 1904
Colorado Springs.....	21,085	John Dietrich.....				
Cripple Creek.....	10,147	Wilson M. Shafer.....	1	Sept. —, 1909	3,000	Sept. —, 1901

^a In cities of 4,000 population and upward.^b No data.^c Supervising principal.^d For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Popula- tion. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
COLORADO—cont'd.						
Denver.....	133,859	Charles Ernest Chadsey.....	3	Sept. 1, 1910	\$6,000	Sept. 1, 1907
Florence.....	3,728	E. A. Kenyon.....	1	May 30, 1909	1,500	June 1, 1907
Grand Junction.....	3,503	John Henry Allen.....	3	June —, 1909	2,000	June —, 1904
Leadville.....	12,455	Frederick Pasqua Austin.....	1	Aug. 31, 1910	2,200	Sept. 1, 1903
Pueblo:						
District No. 1.....	28,157	(Milton C. Potter.....	3	June —, 1911	3,500	Apr. 24, 1908
District No. 20.....		(John Francis Keating.....	3	June 30, 1909	4,000	July 19, 1896
Salida.....	3,722	Edgar Kesner.....	1	Aug. 31, 1910	1,700	June —, 1898
Trinidad.....	5,345	Jesse Robert Morgan.....	1	Sept. —, 1910	1,800	Mar. —, 1909
Victor.....	4,986					
CONNECTICUT.						
Ansonia.....	12,681	Frank M. Buckley.....	1	July 13, 1909	2,000	July 20, 1908
Bridgeport.....	70,996	Charles Winslow Deane.....	3	Aug. 20, 1912	3,900	May —, 1893
Bristol.....	6,268	Newell Jennings.....	1	July —, 1910	900	Feb. 1, 1908
Danbury.....	19,474	George Hussey Tracy.....	1	Aug. 1, 1909	2,200	July —, 1906
Derby.....	7,930	John W. Peck.....	(a)	(a)	2,000	—, 1893
Hartford.....	79,850	Thomas Snell Weaver.....	1	June 1, 1909	2,000	June —, 1901
Manchester (town schools).....	10,601	Louis A. Pratt.....	(b)	(b)		
Meriden.....	28,695	William Powers Kelly.....	3	Aug. 31, 1910	3,000	Aug. 1, 1905
Middletown.....	9,589	Clarence Hood Woolsey.....	1	June —, 1909		Sept. —, 1906
Naugatuck.....	10,541	Frank Warren Eaton.....	1	July —, 1909	2,200	Sept. —, 1900
New Britain.....	25,998	Stanley H. Holmes.....	1	Aug. 1, 1910	3,200	Aug. 1, 1906
New Haven.....	108,027	Frank Herbert Beede.....	5	Sept. —, 1911	3,800	Sept. —, 1900
New London.....	17,548	Charles Bulkeley Jennings.....	1	Sept. —, 1910	2,500	May —, 1908
Norwalk.....	19,932	Edward Hugo Gumbart c.....	1	June —, 1909	1,800	May —, 1907
Norwich:						
Central district.....	17,251	(b)				
West Chelsea district.....		(John Byron Stanton.....	1	Sept. —, 1909	1,700	Sept. —, 1896
Putnam.....	6,667	(b)				
Rockville.....	7,287	Harry Brooks Marsh.....	1	(b)	2,000	Sept. —, 1906
Southington.....	5,890	Charles M. Morse.....	1	July —, 1910	2,200	Sept. —, 1907
South Manchester (ninth district).....		Fred. A. Verplanck.....	(b)	(b)	(b)	
South Norwalk.....	6,591	William Estabrook Chancel- lor.....	1	Sept. —, 1909	2,500	June 20, 1908
Stamford.....	15,997	Everett C. Willard d.....				
Torrington.....	8,360	Edwin H. Forbes.....	1	June —, 1910	2,750	Sept. 1, 1886
Wallingford.....	6,737	Clinton S. Marsh.....	1	July 31, 1908	2,500	
Waterbury.....	45,859	Berlin Wright Tinker.....	2	June —, 1911	3,400	June —, 1897
West Haven.....	5,247	Edgar C. Stiles.....	1	June 21, 1909	2,600	Sept. —, 1898
Willimantic.....	8,937	(c)				
Winsted.....	6,804	William Henry Millington.....	1	July 15, 1909	1,500	Aug. —, 1904
DELAWARE.						
Wilmington.....	76,508	George Wells Twitmyer.....	2	June 30, 1911	2,500	July —, 1900
DISTRICT OF COLUM- BIA.						
Washington.....	278,718	Alexander T. Stuart.....		do	5,000	Jan. 6, 1908
FLORIDA.						
Jacksonville.....	28,429	James Q. Palmer f.....	4	Jan. —, 1913	2,400	Dec. —, 1907
Key West.....	17,114	Virgil Scott Lowe f.....	4	do	1,200	Jan. 5, 1909
Lake City.....	4,013	John William Burns f.....	4	do	1,200	Do.
Live Oak.....	1,659	James Elton Wood f.....	4	Jan. 1, 1909	1,200	
Ocala.....	3,380	John Hunter Workman.....	1	May 22, 1909	1,300	Sept. 1, 1903
Palatka.....	3,301	L. K. Tucker f.....	4	(b)	(b)	
Pensacola.....	17,747	Nathan B. Cook f.....	4	(b)	2,100	Feb. —, 1885
St. Augustine.....	4,272	R. B. Rutherford f.....	4	(b)	(b)	
Tampa.....	15,839	Ludwig Wilhelm Buchholz.....	4	Jan. —, 1913	2,400	Jan. 5, 1909
GEORGIA.						
Albany.....	4,606	Sidney R. de Jarnette.....	1	July 1, 1910	1,600	
Americus.....	7,674	Augustus Griffin Miller.....	1	July 1, 1910	1,800	July 1, 1904
Athens.....	10,245	George Glenn Bond.....	3	June 30, 1911	2,000	
Atlanta.....	89,872	William Maston Slaton.....	(b)	(b)	(b)	
Augusta.....	39,441	Lawton Bryan Evans.....	1	Jan. 1, 1909	3,000	Nov. 11, 1882
Brunswick.....	9,081	Nathaniel Harrison Ballard.....	1	July 1, 1909	2,400	—, 1900

a Indefinite

b No data.

c Principal of high school.

d For 1907-8.

e No superintendent.

f County superintendent.

II.—CITY SUPERINTENDENTS—Continued.

City.	Popula- tion. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
GEORGIA—cont'd.						
Columbus.....	17,614	Carleton Bartlett Gibson....	1	July 1, 1910	\$2,250	July 1, 1896
Cordele.....	3,473	James Austin Mershon.....	1	May 25, 1909	1,200	June 30, 1908
Dalton.....	4,315	Thomas Smith Lucas.....	1	May 7, 1909	1,500	Aug. —, 1908
Dublin.....	2,987	R. E. Brooks.....	(a)	(a)	(a)	
Elberton.....	3,834	P. B. Winn.....	1	June 30, 1910	1,800	July 1, 1909
Gainesville.....	4,382	T. H. Robertson.....	(a)	(a)	(a)	
Griffin.....	6,857	Joseph Henry Walker.....	1	July 1, 1909	2,000	July 1, 1908
Lagrange.....	4,274	Clifford Lewis Smith.....	1	May 31, 1910	1,700	May 1, 1903
Macon.....	23,272	C. B. Chapman.....	1	June —, 1909	2,400	Aug. —, 1904
Marietta.....	4,446	William Thomas Dumas.....	1	June 1, 1909	1,575	
Milledgeville.....	4,219	W. E. Reynolds ^b				
Newnan.....	3,654	Charles Kennon Hender- son, jr.....	1	June 3, 1908	1,500	
Rome.....	7,291	James Coffee Harris.....	2	June 1, 1909	2,000	Nov. —, 1892
Savannah.....	71,239	Otis Ashmore.....	1	July —, 1909	3,600	July —, 1896
Thomasville.....	5,322	John Stephen Allen.....	1	Aug. 31, 1909	1,500	May 1, 1908
Valdosta.....	5,613	Roland Bird Daniel.....	1	May 31, 1910	2,100	June —, 1903
Waycross.....	5,916	Edwin Aldine Pound.....	1	June —, 1910	2,400	Apr. —, 1895
IDAHO.						
Boise.....	5,957	Charles S. Meek.....	1	Aug. 4, 1909	3,000	Mar. —, 1908
Pocatello.....	4,046	Walter R. Siders.....	1	June 1, 1909	2,750	June 1, 1899
ILLINOIS.						
Alton.....	14,210	Robert Allen Haight.....	1	June 30, 1909	2,500	
Aurora:						
District No. 4	24,147	(A. V. Greenman.....	1	June 18, 1909	2,400	
(west side).		(Conrad Myron Bardwell.....	1	July 1, 1910	3,000	
District No. 5						
(east side).						
Batavia.....	3,871	John Nichols Adee.....	1	June 10, 1909	1,700	
Beardstown.....	4,827	Joseph Thomas Gale.....	1	June 1, 1909	1,450	June 25, 1908
Belleville.....	17,484	George H. Busiek.....	1	July 1, 1909	2,300	July 1, 1903
Belvidere:						
North side.....	6,937	(Eugene D. Merriman.....	1	June —, 1910	1,600	
South side.....		(C. H. Le Vitt ^b				
Bloomington.....	23,286	J. K. Stableton.....	(a)	(a)	(a)	
Blue Island.....	6,114	J. E. Lemon.....	1	June 24, 1910	3,000	
Cairo.....	12,566	Taylor Clinton Clendenen.....	1	June 30, 1909	2,400	
Canton.....	6,564	George W. L. Meeker.....	1	June 1, 1910	2,050	
Centralia.....	6,721	Samuel Hallam Bohn.....	1	June 6, 1910	1,800	
Champaign.....	9,068	William Watson Earnest.....	1	June 30, 1909	2,000	
Charleston.....	5,488	De Witt Elwood.....	1	July 1, 1909	1,800	Sept 1, 1903
Chicago.....	1,698,575	Ella Flagg Young.....	(a)	(a)	(a)	
Chicago Heights.....	5,100	Francis Martin Richardson..	1	July 1, 1908	2,200	
Clinton.....	4,452	Henry H. Edmunds.....	1	June 30, 1910	1,500	
Collinsville.....	4,021	Samuel J. Curlee ^b				
Danville.....	16,354	Lin H. Griffith.....	1	July 31, 1910	2,700	
Decatur.....	20,754	Harry Bruce Wilson.....	1	Sept 1, 1909	2,750	
De Kalb.....	9,904	Luther A. Hatch.....	1	July 1, 1909	1,900	
Dixon:						
North side.....	7,917	(H. V. Baldwin.....	1	May 31, 1908	1,500	
South side.....		(Vernon C. Mays.....	1	June 15, 1909	1,700	
Duquoin.....	4,353	Charles William Houk.....	1	May 29, 1910	1,600	May —, 1901
East St. Louis.....	29,655	John Elmer Miller.....	1	July 31, 1910	2,700	
Edwardsville.....	4,157	Heywood Coffield.....	1	June —, 1909	1,500	
Effingham.....	3,774	Thomas Byrns Sullins.....	1	May 31, 1909	1,125	
Elgin.....	22,433	Robert I. White.....	1	July 1, 1910	2,700	
Evanston:						
District No. 75.....	19,259	(Homer Hitchcock Kingsley.....	1	June 30, 1910	3,500	
District No. 76.....		(Fred U. Nichols.....	1	July 1, 1910	3,350	
Forest Park.....	4,085	Asa Paul Goddard.....	1	June —, 1910	1,250	
Freeport.....	13,253	Sigal Elza Raines.....	1	June 30, 1910	2,400	
Galena.....	5,005	Benjamin L. Birkbeck.....	1	June 5, 1908	1,200	
Galesburg.....	18,607	William Lucius Steele.....	1	June 30, 1909	2,700	
Harvey.....	5,395	Frank Lester Miller.....	1	July 1, 1909	1,800	May 1, 1892
Hoopeston.....	3,823	S. K. McDowell.....	1	June 1, 1910	1,800	
Jacksonville.....	15,078	William Alexander Furr.....	1	May 30, 1909	2,000	
Joliet.....	29,353	John A. Long.....	1	July 1, 1909	3,000	
Kankakee.....	13,595	Franklin N. Tracy.....	1	June 30, 1909	2,000	July 1, 1881
Kewanee.....	8,382	Robinson Godfrey Jones.....	1	Sept. 1, 1909	2,200	
La Grange.....	3,969	F. E. Sanford.....	(a)	(a)	(a)	
LaSalle.....	10,446	James B. McManus.....	1	June 30, 1910	1,700	

^a No data.^b For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
ILLINOIS—cont'd.						
Lincoln	8,962	Anthony Middleton	1	June 1, 1909	\$1,500	
Litchfield	5,918	Almon S. Anderson	1	May —, 1909	1,500	
Macomb	5,375	James C. Burns	1	July —, 1909	1,500	
Mattoon	9,622	Gilbert P. Randle	1	June 30, 1909	2,200	
Maywood	4,532	John Porter Adams	1	June —, 1909	2,500	
Mendota (east side)	3,736	John Henry Light	1	do.	1,100	
Metropolis	4,069	F. C. Prowdley	1	Aug. 1, 1909	1,200	
Moline	17,248	Bennett Barron Jackson	1	June 30, 1910	2,700	
Monmouth	7,460	William R. Snyder	1	June 30, 1909	2,000	July 1, 1907
Morris	4,273	Rupert Simpkins ^a				
Mount Carmel	4,311	Walter S. Booth	1	June —, 1909	1,500	
Mount Vernon	5,216	William Miner	1	May 28, 1909	1,600	June 1, 1907
Murphysboro	6,463	William Calhoun	1	May 15, 1909	1,300	May 27, 1905
Normal	3,795	Exum Woodard Davis	1	June 5, 1909	1,500	
Olney	4,260	James Oscar Marberry	1	May 31, 1909	1,350	
Ottawa	10,588	Christopher Joseph Byrne	1	June 30, 1910	1,800	
Pana	5,530	George B. Coffman	1	July 31, 1910	1,600	
Paris	6,105	E. B. Brooks ^a				
Pekin	8,420	James Jackson Crosby	1	Aug. 31, 1909	1,800	June —, 1904
Peoria	56,100	Gerard T. Smith	1	July 31, 1910	3,300	
Peru	6,863	James Robert Hart	1	June —, 1910	1,500	June —, 1907
Pontiac	4,266	Arthur Verner	(b)	(b)	(b)	
Princeton	4,023	George W. Gayler	1	June 5, 1909	1,600	
Quincy	36,252	David Benjamin Rawlins	1	June 30, 1909	2,200	June 23, 1903
Rockford	31,051	Peleg Remington Walker	1	July 1, 1910	2,500	
Rock Island	19,493	Herbert B. Hayden	1	July 31, 1909	2,400	Aug. 1, 1900
Springfield	34,159	Joseph H. Collins	1	June 30, 1909	2,700	
Spring Valley	6,214	James Henry Browning	1	Sept. 1, 1910	1,400	Sept. 1, 1909
Sterling						
District No. 8	6,309	Miss Annie Laurie Hill	1	June 17, 1910	1,300	
District No. 11		H. L. Chapman ^a				
Streator	14,079	M. G. Clark	1	July 1, 1909	2,200	
Sycamore	3,653	Hugh Alvin Bone	1	June —, 1909	1,550	
Taylorville						
East side	4,248	Henry L. Fowkes	1	May —, 1909	1,000	
West side		Prentice H. Deffendall	1	May 6, 1910	900	May 6, 1909
Urbana	5,728	A. P. Johnson	1	July 31, 1908	1,800	
Waukegan	9,426	Miriam Besley	1	July —, 1909	2,250	Aug. —, 1901
INDIANA.						
Alexandria	7,221	Oscar Morton Pittenger	2	June —, 1910	1,700	June —, 1904
Anderson	20,178	J. B. Peary	(b)	(b)	(b)	
Bedford	6,115	Joseph B. Fagan	1	July 1, 1910	2,000	
Bloomington	3,460	Henry Lester Smith	1	Aug. 1, 1910	2,000	Aug. 1, 1909
Bluffton	4,479	Philemon A. Allen	2	Jan. 16, 1909	1,500	
Brazil	7,786	Charles C. Coleman	3	June 15, 1911	2,100	
Columbus	8,130	T. F. Fitzgibbon	3	July —, 1910	2,000	
Connersville	6,836	Guy Mitchell Wilson	1	July 1, 1910	1,800	
Crawfordsville	6,649	Linnæus Neal Hines	4	July 1, 1912	2,000	July 1, 1908
Decatur	4,142	William Beachler	2	June —, 1909	2,250	
East Chicago	3,411	Edwin Nelson Canine	1	Sept. 1, 1910	2,000	
Elkhart	15,184	Ellis H. Drake	3	June 30, 1911	2,400	
Elwood	12,950	(b)				
Evansville	59,007	Frank W. Cooley	1	Sept. —, 1909	4,000	
Fort Wayne	45,115	Justin N. Study	3	July 1, 1912	3,600	
Frankfort	7,100	Edwin S. Monroe	3	June 1, 1909	2,000	
Franklin	4,005	Alva Otis Neal	2	June —, 1909	1,800	June —, 1907
Garrett	3,910	Francis M. Merica	3	Aug. 1, 1912	1,400	June —, 1905
Gas City	3,622	James H. Jeffrey	1	Apr. —, 1910	1,350	Aug. —, 1901
Goshen	7,810	Lillian E. Michael	2	Aug. 1, 1910	2,000	Oct. 8, 1906
Greenfield	4,489	William Chester Gable	3	—, 1911	1,500	—, 1903
Greensburg	5,034	Elmer C. Jerman	1	July 1, 1909	1,620	June —, 1903
Hammond	12,376	C. M. McDaniel ^a				
Hartford City	5,912	William A. Myers	1	July 31, 1909	1,500	Mar. 11, 1908
Huntington	9,491	William Patterson Hart	1	Aug. 31, 1909	2,100	Aug. 31, 1903
Indianapolis	169,164	Calvin N. Kendall	4	July 1, 1909	5,000	July 1, 1900
Jeffersonville	10,774	C. McHenry Marble	3	Aug. 1, 1911	1,800	Feb. 22, 1905
Kokomo	10,609	Robert A. Ogg	1	Aug. 1, 1909	1,800	Aug. 1, 1898
Lafayette	18,116	Robert Foster Hight	1	do.	2,500	July 1, 1904
Laporte	7,113	Arthur Deamer	(b)	(b)	(b)	
Lawrenceburg	4,326	Jesse Winfield Riddle	2	Aug. 1, 1910	1,800	—, 1904
Lebanon	4,465	Henry Grant Brown	2	May 30, 1910	1,600	Apr. 1, 1905
Linton	3,071	Joseph Henry Haseman	1	June —, 1910	1,500	Sept. —, 1905
Logansport	16,204	Albert H. Douglass	1	Aug. 1, 1909	2,400	—, 1891

^a For 1906-7; no later information.^b No data.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
INDIANA—cont'd.						
Madison.....	7,835	Walter A. Jessup.....	2	June —, 1910	\$2,000	Sept. —, 1907
Marion.....	17,337	Joe T. Giles.....	2	Aug. 1, 1911	2,300	June —, 1908
Martinsville.....	4,038	Jeremiah E. Robinson.....	1	July 31, 1909	1,500	June —, 1901
Michigan City.....	14,850	Louis Ward Keeler.....	2	Aug. —, 1910	2,200	Sept. —, 1904
Mishawaka.....	5,560	John F. Numer.....	3	Aug. 1, 1909	1,800	Sept. —, 1903
Montpelier.....	3,405	L. E. Kelley.....	1	July 31, 1909	1,200	June 15, 1895
Mount Vernon.....	5,132	Edward G. Bauman.....	2	June 1, 1911	1,800	Sept. —, 1903
Muncie.....	20,942	Benjamin F. Moore.....	1	July 31, 1909	2,800	May 30, 1908
New Albany.....	20,628	Harry A. Buerk.....	1	July 1, 1909	2,000	Sept. 1, 1908
Noblesville.....	4,792	E. C. Stopher.....	(a)	(a)	(a)	
Peru.....	8,463	Edward Everett Hostetler.....	1	July 1, 1910	1,500	July 1, 1908
Plymouth.....	3,656	Ray Arach Randall.....	3	Aug. —, 1912	2,000	Aug. —, 1903
Portland.....	4,798	Grant E. Derbyshire.....	1	June 30, 1909	1,650	Dec. —, 1905
Princeton.....	6,041	Harold Barnes.....	1	June 1, 1910	1,800	Sept. —, 1903
Richmond.....	18,226	Thomas Abbott Mott.....	3	Aug. 1, 1911	2,500	Aug. 1, 1896
Rushville.....	4,541	Joseph Hiram Sholl.....	1	Aug. 1, 1910	1,500	May —, 1904
Seymour.....	6,445	H. C. Montgomery.....	(a)	(a)	(a)	
Shelbyville.....	7,169	Samuel C. Ferrell.....	2	July 31, 1910	2,000	June 20, 1908
South Bend.....	35,999	Calvin Moon.....	3	Sept. 5, 1911	2,600	June 10, 1892
Terre Haute.....	36,673	James Harney Tomlin.....	1	July 31, 1910	3,000	June 10, 1908
Tipton.....	3,704	J. T. Giles.....	(a)	(a)	(a)	
Valparaiso.....	6,280	Arthur Abram Hughart.....	3	Aug. —, 1910	1,800	June —, 1902
Vincennes.....	10,249	Robert Ila Hamilton.....	1	June 30, 1910	2,400	Mar. 13, 1904
Wabash.....	8,618	Adelaide Steele Baylor.....	3	June —, 1912	2,100	June —, 1903
Warsaw.....	3,987	H. S. Kaufman.....	1	Sept. —, 1909	1,200	Aug. —, 1908
Washington.....	8,551	William Francis Axtell.....	1	July —, 1909	(a)	—, 1894
Whiting.....	3,983	John C. Hall.....	1	June 30, 1910	2,500	July 1, 1903
IOWA.						
Albia.....	2,889	Hugh M. Gilmore.....	1	Sept —, 1910	1,600	May —, 1909
Atlantic.....	5,046	Charles Emery Budgett.....	1	Sept. —, 1909	1,600	Sept. 1, 1907
Boone.....	8,880	Jonathan C. King.....	1	July 1, 1910	2,000	July 8, 1901
Burlington.....	23,201	W. L. Hanson.....	(a)	(a)	(a)	
Cedar Falls.....	5,319	I. M. Kelley ^b	1	July 31, 1909	3,000	Aug. 1, 1900
Cedar Rapids.....	25,656	Joseph Jasper McConnell.....	1	Sept. —, 1909	1,800	Jan. 1, 1905
Centerville.....	5,256	E. N. Gibson.....	1	June —, 1910	1,350	May —, 1909
Chariton.....	3,989	Julius Everett Roberts.....	1	June 10, 1910	1,700	Apr. 9, 1908
Charles City.....	4,227	Edwin T. Armstrong.....	1	June 10, 1910	1,700	Apr. 9, 1908
Cherokee.....	3,865	L. H. Maus ^b	7	May 31, 1910	1,650	May —, 1903
Clarinda.....	3,276	Willard E. Salisbury.....	1	July 31, 1910	2,500	July —, 1889
Clinton.....	22,698	Ozro P. Bostwick.....	1	Aug. 1, 1910	2,400	Aug. 1, 1908
Council Bluffs.....	25,802	John H. Beveridge.....	1	June 30, 1909	1,600	Apr. 10, 1907
Creston.....	7,752	Adam Pickett.....	1	July 1, 1910	3,000	July 1, 1907
Davenport.....	35,254	Frank Leroy Smart.....	1	June —, 1909	1,500	June 1, 1902
Decorah.....	3,246	Henry Charles Johnson.....	1	June 1, 1910	5,000	Oct. —, 1904
Des Moines.....	62,139	William Otis Riddell.....	1	Aug. 1, 1910	2,700	July —, 1895
Dubuque.....	36,297	Franklin T. Oldt.....	(a)	(a)	(a)	
Fairfield.....	4,689	E. C. Roberts.....	1	June 1, 1910	2,300	Apr. 15, 1908
Fort Dodge.....	12,162	R. B. Crone.....	1	Sept. —, 1909	1,500	Apr. —, 1908
Fort Madison.....	9,278	Edward Robert Collins.....	1	July 1, 1910	1,700	Apr. —, 1905
Grinnell.....	3,860	Eugene Henely.....	1	June 30, 1909	1,800	May —, 1907
Iowa City.....	7,987	H. E. Blackmar.....	1	July 1, 1910	2,000	Sept. 1, 1904
Keokuk.....	14,641	William Aldrich.....	1	June —, 1910	2,000	May —, 1908
Le Mars.....	4,146	Francis Eber Palmer.....	1	July 1, 1909	1,800	June 1, 1901
Marion.....	4,102	Grant E. Finch.....	3	Jan. 1, 1910	2,000	Jan. 1, 1907
Marshalltown.....	11,544	Aaron Palmer.....	3	June 30, 1910	1,900	May —, 1905
Mason City.....	6,746	W. A. Brandenburg.....	1	June —, 1908	1,600	Aug. —, 1908
Missouri Valley.....	4,010	Luther C. Bryan.....	(a)	(a)	(a)	
Mount Pleasant.....	4,109	Charles W. Cruikshank.....	1	July 1, 1910	1,800	July 1, 1901
Muscatine.....	14,073	William Franklin Chevalier.....	1	Sept. 1, 1909	1,600	—, 1892
Newton.....	3,682	E. J. H. Beard.....	1	June —, 1909	1,550	Sept. —, 1906
Oelwein.....	5,142	Orris Watson Herr.....	1	June 30, 1910	2,000	—, 1905
Oskaloosa.....	9,212	Frank Whittier Else.....	1	July —, 1909	2,100	July —, 1876
Ottumwa.....	18,197	A. W. Stuart.....	(a)	(a)	(a)	
Perry.....	3,986	G. V. Whaley.....	(a)	(a)	(a)	
Red Oak.....	4,355	W. F. Cramer.....	1	July 1, 1910	3,000	Apr. —, 1908
Sioux City.....	33,111	Ray Sumner Whitley.....	1	June —, 1909	1,700	May —, 1908
Washington.....	4,255	Bruce Francis.....	1	June 1, 1909	2,300	Mar. —, 1907
Waterloo:						
East side.....	12,580	Addison W. Chamberlin.....	1	June 4, 1909	2,000	—, 1898
West side.....		Anson Theodore Hukill.....	1	June 1, 1909	1,800	Apr. —, 1899
Webster.....	4,613	Lyman H. Ford.....	1	June 1, 1909	1,800	Apr. —, 1899

a No data.

b For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Popula- tion. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
KANSAS.						
Argentine.....	5,878	Hardin Price Butcher.....	1	July 1, 1909	\$1,500	
Arkansas City.....	6,140	John F. Bender.....	1	Aug. 1, 1910	1,500	Aug. 1, 1907
Atchison.....	15,722	Nathan Thomas Veatch.....	1	Aug. 31, 1910	1,800	Aug. —, 1901
Chanute.....	4,208	Frank L. Pinet.....	1	Aug. 6, 1910	1,350	Aug. 6, 1909
Cherryvale.....	3,472	Homer Davis Ramsey.....	1	July 1, 1910	1,300	July 1, 1908
Coffeyville.....	4,953	William M. Sinclair.....	1	Aug. —, 1909	1,800	Feb. —, 1903
Concordia.....	3,401	Andrew F. Senter.....	1	June —, 1909	1,600	May —, 1906
Emporia.....	8,223	Lloyd A. Lowther.....	1	June 30, 1910	2,000	Nov. —, 1906
Fort Scott.....	10,322	David M. Bower.....	(a)	(m)	2,000	—, 1895
Galena.....	10,155	L. A. Guthridge.....	1	June —, 1910	1,500	June 7, 1909
Horton.....	3,398	William Wright Wood.....	1	July 1, 1910	1,200	Aug. —, 1905
Hutchinson.....	9,379	Justus O. Hall.....	(a)	(m)	2,000	
Independence.....	4,851	Charles Sumner Risdon.....	1	June 1, 1910	2,400	May 1, 1902
Iola.....	5,791	Lawrence W. Mayberry.....	1	July 1, 1909	1,800	May 14, 1907
Junction City.....	4,695	William Samuel Heusner.....	1	do.....	1,800	July 1, 1902
Kansas City.....	51,418	Matthew Edgar Pearson.....	1	July 1, 1910	2,700	July 1, 1901
Lawrence.....	10,862	Franklin Pierce Smith.....	1	Aug. 1, 1909	2,000	Nov. —, 1894
Leavenworth.....	20,735	George W. Kendrick.....	1	Aug. 1, 1910	2,400	Aug. 1, 1902
Manhattan.....	3,438	John E. Edgerton.....	1	May —, 1909	1,500	June —, 1900
Newton.....	6,208	Lathrop James Hall.....	1	July 1, 1909	1,500	May 15, 1908
Oswatimie.....	4,191	Floyd B. Lee.....	1	June —, 1910	1,125	July —, 1907
Ottawa.....	6,934	Arch L. Bell.....	1	July 1, 1909	1,500	July 1, 1904
Parsons.....	7,682	J. A. Higdon.....	1	Aug. 15, 1909	1,500	Aug. 15, 1904
Pittsburg.....	10,112	Allen Hopkins Bushey.....	1	June 1, 1909	2,000	May —, 1903
Rosedale.....	3,270	George E. Rose.....	1	June —, 1909	1,400	June 1, 1904
Salina.....	6,074	John Lofty.....	1	July 1, 1909	1,800	July 1, 1907
Topeka.....	33,608	Luther Denny Whittemore.....	1	Aug. 1, 1910	2,750	Apr. 4, 1904
Wellington.....	4,245	Edmond G. Kelley.....	1	May 31, 1910	1,350	May 24, 1909
Wichita.....	24,671	Robert Franklin Knight.....	1	Aug. 31, 1910	2,500	May —, 1901
Winfield.....	5,554	John Wesley Spindler.....	1	May 23, 1909	1,800	July —, 1891
KENTUCKY.						
Ashland.....	6,800	Walter Clemens Campbell.....	1½	Sept. 1, 1909	1,800	Jan. 6, 1908
Bellevue.....	6,332	Harvey L. Eby.....	1	June 30, 1908	1,500	
Bowling Green.....	8,226	Thomas Crittenden Cherry.....	2	June 30, 1910	1,800	July 1, 1904
Covington.....	42,938	Homer Oscar Sluss.....	2	July 31, 1911	2,500	Aug. 1, 1907
Danville.....	4,285	John W. Rawlings b.....				
Dayton.....	6,104	James McGinnis.....	1	July 1, 1908	1,500	
Frankfort.....	9,487	Hugh C. McKee.....	1	June 30, 1910	1,800	July —, 1904
Georgetown.....	3,823	R. L. Garrison.....	1	June —, 1909	900	June —, 1875
Henderson.....	10,272	J. W. Welch.....	(a)	(a)	(a)	
Hopkinsville.....	7,280	Barksdale Hamlett.....	1	June 30, 1909	1,800	June 20, 1905
Lexington.....	26,369	Massilon Alexander Cassidy.....	4	June —, 1911	2,400	
Louisville.....	204,731	Edgar H. Mark.....	2	Sept. 1, 1909	5,000	Oct. 2, 1894
Madisonville.....	3,628	Ralph B. Rubins.....	1	May 25, 1909	1,200	Apr. —, 1906
Maysville.....	6,423	James Wood Bradner.....	1	June —, 1909	1,400	May —, 1905
Middlesboro.....	4,163	M. Oliver Winfrey.....	1	June 30, 1908	1,500	
Newport.....	28,301	Ellsworth Regenstein.....	(c)	(m)	2,160	Mar. —, 1906
Owensboro.....	13,189	McHenry Rhoads.....	4	—, 1910	2,400	—, 1900
Paducah.....	19,446	John Albert Carnegie.....	2	Aug. 1, 1910	2,500	Aug. 1, 1907
Paris.....	4,603	George W. Chapman.....	4	June 1, 1910	1,500	Apr. —, 1906
Richmond.....	4,653	Thomas Jackson Coates.....	2	June 30, 1911	1,500	July 1, 1907
Somerset.....	3,384	J. P. W. Brouse.....	(a)	(a)	(a)	
Winchester.....	3,964	R. M. Shiff b.....				
LOUISIANA.						
Alexandria.....	5,648	J. Reese Lin d.....	(a)	(a)	(a)	
Baton Rouge.....	11,269	H. K. Strickland.....	(a)	(a)	(a)	
Crowley.....	4,214	A. S. Bush d.....	(a)	(a)	(a)	
Donaldsonville.....	4,105	Cyrus Jay Brown e.....	4	Sept. 15, 1912	1,800	Sept. 15, 1908
Houma.....	5,428	William Pleasant Tucker e.....	4	Nov. —, 1912	1,100	Nov. —, 1904
Lake Charles.....	6,680	E. S. Jenkins.....	(a)	(a)	(a)	
Monroe.....	5,428	George W. Reid.....	1	May —, 1909	2,000	Sept. —, 1904
New Iberia.....	6,815	Albert Joseph Dupuy e.....	4	July 20, 1912	1,500	July 20, 1908
New Orleans.....	287,104	Warren Easton.....	4	June —, 1912	4,000	Oct. —, 1888
Shreveport.....	16,013	C. E. Byrd e.....	4	Nov. —, 1912	3,500	

a No data.

b For 1906-7; no later information.

c Indefinite.

d Principal of high school.

e Parish superintendent.

II.—CITY SUPERINTENDENTS—Continued.

City.	Popula- tion. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
MAINE.						
Auburn.....	12,951	H. H. Randall.....	(a)	(a)	(a)	
Augusta.....	11,683	Daniel Wolford La Rue.....	1	July 31, 1909	\$2,000	Aug. 1, 1907
Bangor.....	21,850	Charles Edward Tilton.....	1	June 15, 1909	1,800	Aug. 14, 1900
Bath.....	10,477	Frederick W. Freeman.....	1	June —, 1909	1,600	Aug. —, 1904
Belfast.....	4,615	Alonzo J. Knowlton.....	1	July 31, 1909	1,000	July 3, 1906
Biddeford.....	16,145	Charles M. Pennell.....	5	Aug. 1, 1913	1,500	July 24, 1908
Brewer.....	4,835	Charles Norman Perkins.....	1	Aug. 12, 1909	1,350	Aug. 12, 1908
Brunswick.....	5,210	John Albert Cone.....	1	Aug. 15, 1909	1,400	Aug. 15, 1908
Calais.....	7,655	James Madison Pike.....	1	May 1, 1910	1,400	Apr. 15, 1909
Eastport.....	5,311	Fred Benson.....	1	July 1, 1909	1,200	July 1, 1908
Ellsworth.....	4,297	Perry A. A. Killam.....	1	Mar. —, 1910	500	Mar. 9, 1909
Gardiner.....	5,501	Charles O. Turner.....	3	July 1, 1910	1,300	Apr. 1, 1903
Houlton.....	4,686	William Frederick Coan.....	1	Mar. 31, 1910	1,525	Apr. 1, 1909
Lewiston.....	23,761	Arthur Joseph Collins.....	1	July 31, 1909	2,100	Sept. 14, 1907
Oldtown.....	5,763	Daniel Lyman Wornwood.....	1	Apr. 30, 1909	1,750	Apr. 4, 1905
Portland.....	50,145	Mrs. Mary B. Brown.....	1	(a)	(a)	
Rockland.....	8,150	Giles A. Stuart.....	(a)	(a)	(a)	
Saco.....	6,122	Joseph H. Hefflon.....	1	July 1, 1909	1,000	Sept. 1, 1906
Sanford.....	6,078	David Wilder Colby.....	1	July 31, 1910	1,500	Aug. 1, 1908
Skowhegan.....	4,266	De Forest Henry Perkins.....	1	July 1, 1909	1,600	July 1, 1908
South Portland.....	6,287	James Otis Kaler.....	1	Mar. —, 1910	1,000	—, 1899
Waterville.....	9,477	Dennis E. Bowman.....	1	July 1, 1910	1,650	July 1, 1905
Westbrook.....	7,283	Prescott Keyes.....	1	do.....	1,800	June 1, 1908
MARYLAND.						
Annapolis.....	8,402	Samuel Garner ^b	2	Sept. 1, 1910	1,200	Sept. 1, 1908
Baltimore.....	508,957	James H. Van Sickle.....	(c)	(c)	5,000	July 1, 1900
Cambridge.....	5,747	William P. Beckwith ^b	2	Aug. 7, 1908	1,200	
Cumberland.....	17,128	Archibald C. Willson ^b	4		2,100	Feb. —, 1906
Frederick.....	9,296	Oscar B. Coblenz ^b	2	Aug. 1, 1908	1,500	
Frostburg.....	5,274	Olin Robson Rice ^d	(a)	(a)	1,150	—, 1903
Hagerstown.....	13,591	John P. Fockler ^b				
Salisbury.....	4,277	William James Holloway.....	2	May —, 1910	1,400	Aug. —, 1908
MASSACHUSETTS.						
Abington.....	4,489	John E. De Meyer.....	1	Sept. 1, 1910	1,800	Sept. 1, 1909
Adams.....	11,134	Francis Asbury Bagnall.....	1	Aug. —, 1909	2,500	Aug. —, 1901
Amesbury.....	9,473	(a)				
Amherst.....	5,028	Audobon Levi Hardy.....	1	Sept. —, 1909	1,950	Sept. —, 1898
Andover.....	6,813	Sherburn C. Hutchinson.....	1	Aug. 31, 1910	1,800	May —, 1908
Arlington.....	8,603	John F. Scully.....	(a)	(a)	(a)	
Athol.....	7,061	Winfield Scott Ward.....	1	Sept. 1, 1909	2,000	Apr. 1, 1897
Attleboro.....	11,335	Lewis Adams Fales.....	1	Aug. 15, 1910	2,100	Aug. 1, 1905
Barnstable.....	4,364	George Homer Galger.....	1	Aug. 1, 1909	1,700	Do.
Belmont.....	3,929	George Peters Armstrong ^e	1	Aug. 31, 1910	2,000	Apr. —, 1896
Beverly.....	13,884	Adelbert Leon Safford.....	1	Sept. 1, 1910	2,200	Apr. 18, 1893
Blackstone.....	5,721	Joseph P. McCooey.....	(a)	(a)	(a)	
Boston.....	560,892	Stratton D. Brooks.....	6	Sept. 1, 1912	6,000	Mar. 21, 1906
Braintree.....	5,981	John Clinton Anthony.....	1	Sept. 1, 1909	1,800	June 14, 1906
Bridgewater.....	5,806	(a)				
Brockton.....	40,063	Don C. Bliss.....	1	June —, 1910	3,000	July 1, 1907
Brookline.....	19,935	George I. Aldrich.....	1	Aug. 2, 1908	4,000	
Cambridge.....	91,886	Frank Edson Parlin.....	1	Sept. 1, 1910	3,500	July 31, 1909
Canton.....	4,584	James S. Perkins.....	1	Mar. —, 1910	1,800	—, 1891
Chelmsford.....	3,984	Arthur Palmer Briggs.....	1	July 31, 1910	1,600	May 28, 1908
Chelsea.....	34,072	Benjamin Carlisle Gregory.....	(c)	(c)	2,800	June —, 1902
Chicopee.....	19,167	John Cameron Gray.....	1	July 1, 1910	2,250	Sept. 1, 1901
Clinton.....	13,667	Charles Loraine Hunt.....	1	July 1, 1909	2,000	June —, 1889
Concord.....	5,652	Wells Albert Hall.....	1	June —, 1909	2,000	May 6, 1907
Danvers.....	8,542	Henry Coburn Sanborn.....	1	July 1, 1910	2,000	July 1, 1907
Dedham.....	7,457	Roderick W. Hine.....	1	do.....	2,200	Aug. —, 1893
Easthampton.....	5,603	William Dana Miller.....	1	July 1, 1909	1,700	July 1, 1896
Easton.....	4,837	Frederic S. Pope.....	1	Sept. —, 1910	1,700	June —, 1905
Everett.....	24,336	Fred E. Corbin.....	1	Sept. 1, 1910	2,100	
Fairhaven.....	3,567	Frank M. Marsh.....	1	July 1, 1909	2,400	July —, 1901
Fall River.....	104,863	Everett Brownell Durfee.....	1	Aug. 31, 1910	3,000	July —, 1905
Fitchburg.....	31,531	Joseph G. Edgerly.....	1	July 31, 1910	2,700	Sept. 27, 1875
Framingham.....	11,302	Samuel F. Blodgett.....	1	Sept. —, 1910	2,000	—, 1895
Franklin.....	6,017	Irving H. Gamwell.....	1	June 30, 1908	1,000	
Gardner.....	10,813	Judson I. Wood.....	1	June —, 1910	2,100	June —, 1899
Gloucester.....	26,121	Freeman Putney.....	1	July 1, 1910	2,300	Mar. —, 1888
Grafton.....	4,869	Robert Orange Small.....	1	July —, 1910	2,000	May —, 1903

^a No data.^b County superintendent.^c Indefinite.^d Principal Beall High School.^e Superintendent at Belmont and Lexington.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
MASSACHUSETTS— continued.						
Great Barrington....	5,854	J. Francis Allison.....	1	Sept. 1, 1909	\$1,750	Aug. 27, 1907
Greenfield.....	7,927	Hubert Eliot Richardson....	1	June 30, 1910	2,000	July 1, 1906
Haverhill.....	37,175	George Edwin Gay.....	1	Aug. 31, 1909	2,500	Sept. 1, 1906
Hingham.....	5,059	Nelson George Howard.....	1	Mar. —, 1909	2,500	Aug. —, 1898
Holyoke.....	45,712	J. L. Riley.....	3	Aug. 1, 1912	3,000	Apr. 16, 1909
Hudson.....	5,454	Cassius Samuel Lyman.....	1	July 1, 1909	2,000	Sept. 1, 1906
Hyde Park.....	13,244	Horace L. Brittain.....	1	Sept. 1, 1909	2,500	Sept. 1, 1907
Ipswich.....	4,658	John P. Marston.....	1	June 30, 1910	2,200	—, 1909
Lawrence.....	62,559	Bernard M. Sheridan.....	1	Dec. 31, 1908	3,500	May 16, 1904
Lee.....	3,596	Preston Barr.....	1	May 1, 1909	1,500	Apr. 29, 1904
Leominster.....	12,392	Thomas Edward Thompson..	1	July 1, 1909	2,200	July 1, 1895
Lexington.....	3,831	George Peters Armstrong....	1	Aug. 31, 1909	2,400	—, 1906
Lowell.....	94,969	Arthur Kincaid Whitcomb..	1	Sept. 1, 1910	3,000	Sept. 1, 1891
Ludlow.....	3,536	Walter E. Gushie.....	1	June 30, 1910	1,700	June —, 1903
Lynn.....	68,513	Frank J. Peaslee.....	1	Sept. 1, 1908	3,000	June 26, 1901
Malden.....	33,664	Henry Dwight Henely.....	1	July 1, 1909	2,700	July 1, 1903
Mansfield.....	4,006	Edward Payson Fitts.....	1	Apr. 9, 1910	1,800	Apr. 9, 1891
Marblehead.....	7,582	Almorin Orton Caswell.....	1	Aug. 1, 1909	1,800	May —, 1907
Marlboro.....	13,609	Orion Albion Morton.....	1	May —, 1909	2,100	Jan. 18, 1905
Maynard.....	3,142	John Clarence Mackin.....	1	Sept. 1, 1908	1,500	—, 1906
Medford.....	18,244	Charles H. Morss.....	1	July —, 1909	2,800	June —, 1895
Melrose.....	12,962	Fred Herbert Nickerson....	1	Aug. —, 1909	2,450	Aug. —, 1898
Methuen.....	7,512	Charles Albert Breck.....	1	July 1, 1909	1,300	Apr. 8, 1904
Middleboro.....	6,885	Charles Henry Bates.....	1	Mar. —, 1910	2,100	Oct. —, 1901
Milford.....	11,376	Charles W. Haley.....	1	July —, 1910	1,800	Nov. —, 1896
Millbury.....	4,460	Ira T. Chapman.....	1	Aug. 1, 1909	1,800	Aug. —, 1907
Milton.....	6,578	Asher Johnson Jacoby.....	1	Aug. 31, 1910	1,800	Sept. —, 1901
Monson.....	3,402	Frederic A. Wheeler.....	1	July 1, 1910	1,500	Aug. —, 1902
Montague.....	6,150	Frank Prosper Davison.....	1	—, do.....	1,800	Jan. —, 1902
Natick.....	9,488	Albert L. Barbour.....	1	Sept. 1, 1909	2,200	Sept. 1, 1900
Needham.....	4,016	Walter Knight Putney.....	1	Sept. —, 1909	1,200	Dec. 31, 1906
New Bedford.....	62,442	Allen Phelps Keith.....	1	June 6, 1910	4,000	June 1, 1908
Newburyport.....	14,478	Edgar Lincoln Willard.....	(a)	(a)	1,700	June 25, 1906
Newton.....	33,587	Frank E. Spaulding.....	1	Aug. 31, 1909	5,000	Sept. —, 1904
North Adams.....	24,200	Isaac Freeman Hall.....	1	Sept. 1, 1909	2,500	June —, 1895
Northampton.....	18,643	Fayette K. Congdon.....	1	Aug. 1, 1910	2,200	Aug. 1, 1905
North Andover.....	4,243	Wallace Edward Mason.....	1	Sept. 1, 1909	2,200	Sept. 1, 1906
North Attleboro.....	7,253	Robert Jacquith Fuller.....	1	Sept. —, 1909	1,900	July —, 1907
Northbridge.....	7,036	Samuel Appleton Melcher..	1	Apr. —, 1909	2,350	—, 1888
North Brookfield.....	4,587	Burr Jay Merriam.....	1	July 1, 1910	1,550	July 1, 1906
Norwood.....	5,480	Austin H. Fittz.....	1	Aug. 1, 1910	1,800	Apr. 16, 1909
Orange.....	5,520	Edward Dixon.....	1	July 1, 1909	1,700	Sept. 1, 1901
Palmer.....	7,801	Lee Thomas Gray.....	1	July —, 1910	2,000	July —, 1907
Peabody.....	11,523	Albert Robinson.....	1	Sept. 1, 1910	1,900	Sept. —, 1903
Pittsfield.....	21,766	Clarence John Russell.....	1	—, do.....	1,800	Sept. 1, 1909
Plymouth.....	9,592	Francis J. Heavens.....	1	May —, 1909	2,000	—, 1894
Provincetown.....	4,247	Herman Nelson Knox.....	1	Sept. 1, 1910	1,600	July 20, 1908
Quincy.....	23,899	Frank Edson Parlin.....	1	Dec. 31, 1909	2,700	Aug. —, 1900
Randolph.....	3,993	Watson Clark Lea.....	1	July 1, 1909	1,500	May —, 1907
Reading.....	4,969	Melville A. Stone.....	1	Aug. 31, 1909	1,720	May 12, 1899
Revere.....	10,395	Clarence H. Dempsey.....	1	Sept. 1, 1909	2,300	Sept. 1, 1908
Rockland.....	5,327	William L. Coggins.....	1	—, do.....	1,500	May —, 1905
Rockport.....	4,592	William Francis Eldredge..	1	June 30, 1910	1,200	June —, 1904
Salem.....	35,956	John W. Perkins.....	1	Sept. 1, 1909	2,500	Sept. 1, 1894
Saugus.....	5,084	Fairfield Whitney.....	1	June 30, 1910	1,500	May —, 1908
Somerville.....	61,643	Charles Shedd Clark.....	1	Sept. —, 1910	3,000	June 11, 1908
Southbridge.....	10,025	Fred E. Corbin.....	1	—, do.....	2,100	—, 1902
South Hadley.....	4,526	Frederic Ellsworth Whitte- more.....	1	Apr. —, 1910	1,750	Apr. —, 1904
Spencer.....	7,627	Charles F. Adams.....	1	Aug. —, 1908	1,600	Aug. —, 1903
Springfield.....	62,059	Wilbur Fisk Gordy.....	1	Mar. 31, 1910	4,000	Sept. 1, 1904
Stoneham.....	6,197	Charles Edwin Stevens.....	1	Apr. —, 1910	2,200	May —, 1894
Stoughton.....	5,442	Edward P. Fitts.....	(b)	(b)	(b)	—, 1906
Swampscott.....	4,548	William Joseph Pelo.....	(a)	(a)	c1,000	Sept. —, 1906
Taunton.....	31,036	Henry W. Harrub.....	1	Aug. 31, 1909	2,400	June 24, 1905
Wakefield.....	9,290	Jacob H. Carfrey.....	1	Sept. 1, 1910	2,000	Aug. 15, 1905
Waltham.....	23,481	William Dwight Parkinson..	(a)	(a)	2,500	June —, 1898
Ware.....	8,263	George Wilbert Cox.....	1	Aug. 31, 1909	2,000	July —, 1902
Warren.....	4,417	Parker T. Pearson.....	1	Aug. 1, 1909	1,600	Aug. 1, 1905
Watertown.....	9,706	Wilfred H. Price.....	1	Sept. —, 1909	1,850	Feb. 1, 1908
Webster.....	8,804	Ernest William Robinson..	1	Aug. 1, 1909	2,100	June 15, 1903
Wellesley.....	5,072	Marshall Livingston Perrin..	1	June 30, 1909	1,300	Mar. —, 1893
Westboro.....	5,400	Harry C. Waldron.....	1	Sept. 1, 1910	1,800	Sept. 1, 1895
Westfield.....	12,310	Charles L. Simmons.....	1	—, do.....	2,400	Aug. —, 1903

a Indefinite.

b No data.

c For two days a week.

II.—CITY SUPERINTENDENTS—Continued.

City.	Popula- tion. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
MASSACHUSETTS— continued.						
West Springfield....	7,105	Clarence Elwood Brockway.	1	June 30, 1909	\$1,800	Sept. —, 1899
Weymouth.....	11,324	Parker T. Pearson.	(a)	(a)	(a)	
Whitman.....	6,155	George Francis Ellinwood.	1	Jan. 1, 1910	1,500	July 15, 1908
Williamstown.....	5,013	Walter Goodwin Mitchell.	1	Apr. —, 1910	1,200	Apr. —, 1896
Winchendon.....	5,001	Myron J. Willson.	1	Sept. 1, 1910	1,800	Sept. 1, 1909
Winchester.....	7,248	Schuyler F. Herron.	1	July 31, 1910	2,500	Sept. 1, 1907
Winthrop.....	6,058	Frank A. Douglas.	1	Sept. 1, 1910	2,400	—, 1896
Woburn.....	14,254	George Irving Clapp.	3	Sept. 1, 1911	2,000	June —, 1903
Worcester.....	118,421	Homer Pierce Lewis.	3	June 1, 1912	4,250	Apr. —, 1903
MICHIGAN.						
Adrian.....	9,654	Charles William Mickens.	2	June —, 1909	2,000	May —, 1903
Albion.....	4,519	William J. McKone.	1	June 12, 1909	1,700	Sept. —, 1898
Alpena.....	11,802	George Alfred Hunt.	1	June —, 1909	1,650	July —, 1896
Ann Arbor.....	14,509	Herbert Miner Slauson.	1	July 1, 1909	2,600	Apr. —, 1898
Battle Creek.....	18,563	William Gibson Coburn.	1	Sept. —, 1910	2,700	Sept. 1, 1895
Bay City.....	40,747	John Alexander Stewart.	1	July 31, 1910	3,000	Aug. 1, 1894
Benton Harbor.....	6,562	William Robins Wright.	1	May 28, 1909	1,800	Sept. —, 1905
Bessemer.....	3,911	Matthew J. Walsh.	1	July —, 1910	1,700	Sept. —, 1907
Big Rapids.....	4,686	Paul C. Stetson.	1	June 30, 1910	1,300	May 16, 1909
Cadillac.....	5,997	George A. McGee.	1	July —, 1908	2,000	
Calumet.....	40,704	Henry Elton Kratz.	1	July —, 1910	3,500	July —, 1902
Charlotte.....	4,092	Charles H. Carrick.	1	June 16, 1909	1,800	Sept. —, 1906
Cheboygan.....	6,489	Archie R. Gilpin.	2	June 24, 1911	1,800	Apr. 5, 1909
Coldwater.....	6,212	Edward M. McElroy.	2	June —, 1910	1,800	Sept. —, 1907
Detroit.....	285,704	Wales Cumberland Martin- dale.	3	July —, 1909	4,000	July 1, 1897
Dowagiac.....	4,151	Warren E. Conkling.	1	June 18, 1909	1,600	June —, 1896
Escanaba.....	9,549	F. Dayton Davis.	2	June —, 1910	2,700	Sept. —, 1904
Flint.....	13,103	Alvin N. Cody.	1	July 1, 1909	2,100	Do.
Grand Haven.....	4,743	Lawrence Hoffman van den Berg.	3	June 30, 1911	1,850	Mar. —, 1907
Grand Rapids.....	87,565	William Albert Greeson.	1	June 30, 1910	3,500	July —, 1906
Hancock.....	4,050	Eugene La Rowe.	1	July 12, 1909	2,000	Jan. —, 1902
Hillsdale.....	4,151	Samuel Jerome Gier.	3	—, —, 1910	1,500	—, —, 1900
Holland.....	7,790	Willis T. Bishop.	2	July 1, 1909	1,800	July —, 1905
Houghton.....	3,359	John Arnold Doeale.	1	June —, 1909	2,100	Sept. —, 1906
Ironia.....	5,209	William Sherman Lister.	1	June 24, 1910	1,600	May —, 1908
Iron Mountain.....	9,242	Lee Earl Amidon.	1	June 30, 1910	2,500	July 1, 1898
Ironwood.....	9,705	John V. Brennan.	1	July 1, 1910	2,250	Aug. 10, 1909
Ishpeming.....	13,255	E. E. Scribner.	1	June —, 1909	3,000	—, —, 1896
Jackson.....	25,180	Leroy S. Norton.	1	June 25, 1909	2,500	—, —, 1896
Kalamazoo.....	24,404	Shattuck O. Hartwell.	1	July 1, 1910	3,000	June 1, 1901
Lansing.....	16,485	Edward Page Cummings.	1	June —, 1910	2,250	Apr. —, 1907
Ludington.....	7,166	Frank Estes Millar.	1	June 10, 1909	1,900	May —, 1908
Manistee.....	14,260	Guy D. Smith.	1	July 1, 1910	2,000	Oct. —, 1908
Manistique.....	4,126	W. E. Hanson.	1	June 25, 1909	1,800	May —, 1903
Marine City.....	3,829	P. E. Dennis.	1	June —, 1910	1,300	
Marquette.....	10,058	Gustav William Gehrand.	1	July 1, 1910	2,700	Apr. 20, 1908
Marshall.....	4,370	A. H. Washburn.	1	July —, 1910	1,400	Sept. —, 1901
Menominee.....	12,818	E. J. Shives.	1	July —, 1909	2,400	
Monroe.....	5,043	Fred J. S. Toozie.	2	June 26, 1909	1,800	Apr. —, 1907
Mount Clemens.....	6,576	John Phelps Everett.	2	June 30, 1910	1,800	Aug. —, 1905
Mount Pleasant.....	3,362	Charles Erna White.	1	June 12, 1909	1,375	
Muskegon.....	20,818	Joseph M. Frost.	1	July —, 1910	3,000	Aug. —, 1903
Negaunee.....	6,935	Orr Schurtz.	1	July 1, 1909	2,000	May —, 1901
Niles.....	4,287	John Dowling Schiller.	1	June 15, 1910	1,700	Sept. —, 1887
Norway.....	4,170	Charles E. Cullen.	1	July 1, 1909	1,800	June —, 1904
Owosso.....	8,696	W. E. Hanson.	1	June —, 1910	1,800	Apr. —, 1909
Petoskey.....	5,285	Howard McKenny Elliott.	1	Sept. —, 1909	1,500	—, —, 1905
Pontiac.....	9,769	F. P. Buck.				
Port Huron.....	19,158	Walter F. Lewis.	1	Aug. 1, 1909	2,100	July 1, 1899
Saginaw.....						
East Side.....	42,345	Eugene Clarence Warriner.	1	June 30, 1910	3,000	Do.
West Side.....		Philipp Huber.	1	June 22, 1910	2,200	May —, 1903
St. Joseph.....	5,155	Ernest P. Clarke.	1	June 1, 1909	1,800	July —, 1899
Sault Ste. Marie.....	10,538	Edgar E. Ferguson.	1	June 15, 1909	2,600	Aug. 15, 1895
South Haven.....	4,009	Arthur Douglas Prentice.	1	June —, 1909	1,400	—, —, 1890
Three Rivers.....	3,550	Leon Lewis Tyler.	3	June 12, 1911	1,800	July 15, 1907
Traverse City.....	9,407	Isaac Burton Gilbert.	2	Sept. —, 1911	2,200	Feb. —, 1902
Wyandotte.....	5,183	Hiram Charles Daley.	1	July 1, 1908	1,300	Apr. 1, 1908
Ypsilanti.....	7,378	William B. Arbanga.	3	June 30, 1910	2,000	Jan. 23, 1903

a No data.

b For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
MINNESOTA.						
Albert Lea.....	4,500	Eugene Marion Phillips.....	1	July 1, 1910	\$2,000	Mar. 1, 1902
Anoka.....	3,789	Freeman Ellsworth Lurton.....	1	June —, 1910	1,500	—, 1906
Austin.....	5,474	George A. Franklin.....	1	June —, 1909	2,200	Mar. —, 1906
Brainerd.....	7,524	(a)				
Crookston.....	5,359	Ezra Elmer McIntire.....	3	—, 1910	2,000	—, 1903
Duluth.....	52,969	Robert Edward Denfeld.....	3	July 31, 1911	4,000	Aug. —, 1885
Ely.....	3,717	Charles L. Newberry.....	1	June 30, 1909	2,100	Sept. —, 1900
Eveleth.....	2,752	Burton O. Greening.....	1	Sept. 1, 1910	2,700	Aug. —, 1904
Faribault.....	7,868	Leslie J. Montgomery.....	1	Aug. —, 1910	1,800	Mar. —, 1909
Fergus Falls.....	6,072	Ray Butts MacLean.....	1	June 10, 1909	1,700	Apr. 1, 1907
Hastings.....	3,811	Edgar L. Porter ^b				
Little Falls.....	5,774	Harry E. White.....	1	June 1, 1909	1,800	Aug. 1, 1903
Mankato.....	10,599	Frederick J. Sperry.....	1	June 1, 1910	1,800	July 15, 1909
Minneapolis.....	202,718	Charles Morison Jordan.....	3	July 1, 1910	5,205	—, 1892
Moorhead.....	3,730	Freeman E. Lurton.....	1	June —, 1909	1,800	Sept. —, 1907
New Ulm.....	5,403	Ernest Thomas Critchett.....	2	July 31, 1911	1,800	Jan. —, 1894
Owatonna.....	5,561	Philip J. Kuntz.....	1	July 1, 1910	2,000	June 1, 1899
Red Wing.....	7,525	John L. Silvernale.....	1	June 1, 1909	1,800	Feb. 4, 1907
Rochester.....	6,843	Charles Lingle Woodfield.....	1	June —, 1910	1,800	Apr. —, 1909
St. Cloud.....	8,663	August N. Farmer.....	1	Sept. 1, 1910	2,250	—, 1906
St. Paul.....	163,065	Silvanus Laurabee Heeter.....	2	June 1, 1910	5,000	June 1, 1906
St. Peter.....	4,302	P. P. Kennedy.....	1	June 1, 1910	1,530	Sept. 1, 1907
Stillwater.....	12,318	William Harrod Hollands.....	1	June 4, 1909	1,800	Sept. 1, 1908
Virginia.....	2,962	Lafayette Bliss.....	3	—, 1911	3,000	—, 1904
Willmar.....	3,409	Peter Christian Tonning.....	1	Aug. 1, 1909	1,800	Mar. 1, 1903
Winona.....	19,714	John Nichols Adee.....	1	July 31, 1910	2,400	—, 1903
MISSISSIPPI.						
Biloxi.....	5,467	Thomas Kendall Baggan.....	1	July 1, 1910	2,000	July 1, 1908
Canton.....	6,484	John Calhoun Windham.....	1	May 27, 1910	1,500	—, 1906
Columbus.....	6,484	Joe Cook.....	3	Sept. —, 1911	2,000	Sept. —, 1901
Corinth.....	3,661	William Peyton Dobbins.....	1	May 27, 1908	1,500	—, 1901
Greenville.....	7,642	E. E. Bass.....	1	Aug. —, 1910	2,100	—, 1884
Hattiesburg.....	4,175	Friley Benjamin Woodley.....	1	do.....	2,000	June —, 1901
Jackson.....	7,816	Edward L. Bailey.....	(a)	(a)	2,500	Sept. 1, 1900
Laurel.....	3,193	Richard Henry Watkins.....	1	June 3, 1910	2,200	May 18, 1907
McComb.....	4,477	Henry Preston Hughes.....	3	Sept. 1, 1911	2,250	May —, 1901
Meridian.....	14,050	John Clayton Fant.....	2	Aug. 1, 1909	2,750	Aug. 1, 1896
Natchez.....	12,210	(a)				
Vicksburg.....	14,834	John Pinckney Carr.....	1	Sept. 1, 1910	2,000	Sept. 1, 1906
Water Valley.....	3,813	Nathaniel Eldredge Traywick.....	3	—, 1909	1,200	—, 1906
Yazoo City.....	4,944	M. Rose.....	1	June 1, 1908	2,000	—, 1906
MISSOURI.						
Aurora.....	6,191	Millard F. Butler.....	3	June —, 1909	1,000	June —, 1906
Boonville.....	4,377	M. A. O'Rear.....	1	June 30, 1910	1,500	June —, 1903
Brookfield.....	5,484	James U. White.....	1	July 1, 1909	1,500	July —, 1899
Cape Girardeau.....	4,815	A. W. Lawson ^b				
Cartersville.....	4,445	Worth James Osborne.....	1	July 1, 1909	1,150	July 1, 1908
Carthage.....	9,416	Joseph M. White.....	1	July 1, 1910	2,500	July 1, 1903
Chillicothe.....	6,905	A. R. Coburn.....	1	June 30, 1909	1,400	June 10, 1908
Clinton.....	5,061	Arthur Lee.....	1	June 1, 1910	1,700	June 1, 1902
Columbia.....	5,651	William Henry Hays.....	2	July 31, 1910	1,600	Aug. 1, 1904
De Soto.....	5,611	R. C. Ogier.....	1	June 30, 1909	1,320	—, 1905
Fulton.....	4,883	W. A. Wells.....	(a)	(a)	(a)	
Hannibal.....	12,780	Livingstone McCartney.....	1	June 30, 1911	2,200	July 1, 1909
Independence.....	6,974	William L. C. Palmer.....	1	Sept. 1, 1909	1,720	May 28, 1901
Jefferson City.....	9,664	Robert B. D. Simonson.....	1	June 30, 1910	1,500	Apr. —, 1907
Joplin.....	26,023	George Victor Buchanan.....	1	July 1, 1910	2,800	June —, 1908
Kansas City.....	163,752	James Mickleborough Greenwood.....	1	June 30, 1910	4,500	June —, 1874
Kirkville.....	5,966	Elmer Orlando Jones.....	1	—, 1909	1,250	May —, 1908
Lexington.....	4,190	Melvin Joseph Patterson.....	1	June —, 1909	1,500	—, 1906
Louisiana.....	5,131	Miss Elizabeth Whitaker.....	1	May 21, 1910	1,350	June 1, 1901
Macon.....	4,068	S. E. Seaton.....	1	July 31, 1909	1,200	July —, 1908
Marshall.....	5,086	Henry Hileman Edmiston.....	1	May 25, 1909	1,500	—, 1907
Maryville.....	4,577	Charles A. Hawkins.....	1	May —, 1909	1,500	Jan. —, 1903
Mexico.....	5,099	Lee Byrnes Hawthorne.....	1	May 30, 1909	1,500	Sept. —, 1903
Moberly.....	8,012	J. C. Lilly ^c				
Nevada.....	7,461	James Woods Storms.....	1	July 1, 1909	1,800	July 1, 1905
Poplar Bluff.....	4,321	William Lee Barrett.....	1	May 29, 1909	1,800	Sept. 9, 1904
Rich Hill.....	4,053	L. F. Robinson ^b				

^a No data.^b For 1906-7; no later information.^c For 1907-8.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
MISSOURI—cont'd.						
St. Charles.....	7,982	Joseph Herring ^a	—	—	—	—
St. Joseph.....	102,979	John A. Whiteford.....	2	June 30, 1910	\$3,000	May 20, 1904
St. Louis.....	575,238	Ben Blewett.....	4	June —, 1912	7,000	June —, 1908
Sedalia.....	15,231	John P. Gass.....	1	July 1, 1909	2,200	June 12, 1908
Springfield.....	23,267	Jonathan Fairbanks.....	1	May 28, 1909	2,250	May —, 1875
Trenton.....	5,396	Charles Arthur Greene.....	3	Apr. —, 1910	1,500	July 1, 1906
Warrensburg.....	4,724	Edward Beatty.....	1	June 30, 1910	1,200	July 1, 1909
Webb City.....	9,201	R. S. Nichols ^b	—	—	—	—
MONTANA.						
Anaconda.....	9,453	William Kilian Dwyer.....	1	July 31, 1909	2,700	— 1, 1904
Bozeman.....	3,419	Risdon J. Cunningham.....	1	Aug. 31, 1909	2,000	Jan. 1, 1905
Butte.....	30,470	Robert G. Young.....	1	July 31, 1909	4,000	—, 1899
Great Falls.....	14,930	Samuel D. Largent.....	1	Aug. 31, 1910	3,000	May —, 1898
Helena.....	10,770	Randall J. Condon.....	1	Aug. —, 1910	3,600	May —, 1902
Missoula.....	4,366	J. Ulysses Williamson.....	1	Aug. 1, 1910	2,200	Apr. 1, 1906
NEBRASKA.						
Beatrice.....	7,875	Edwin J. Bodwell.....	3	Aug. 1, 1911	2,000	Aug. 1, 1908
Fremont.....	7,241	Archibald H. Waterhouse.....	3	June 30, 1911	2,500	Apr. 15, 1908
Grand Island.....	7,554	Robert J. Barr.....	3	July 1, 1909	2,100	July —, 1882
Hastings.....	7,188	Samuel H. Thompson.....	1	June 4, 1910	2,000	Apr. —, 1908
Kearney.....	5,634	George Burgert.....	1	June 1, 1909	1,800	May —, 1905
Lincoln.....	40,169	William Logan Stephens.....	3	Aug. —, 1909	2,700	May —, 1903
Nebraska City.....	7,380	George Ellsworth Martin.....	1	July 1, 1909	1,600	May 18, 1908
Norfolk.....	3,883	Fred M. Hunter.....	1	June 1, 1910	1,675	Apr. 24, 1908
North Platte.....	3,640	Wilson Tout.....	1	Sept. 1, 1909	1,400	Sept. 1, 1908
Omaha.....	102,555	William Mehard Davidson.....	3	Aug. —, 1911	5,000	Mar. —, 1904
Plattsmouth.....	4,964	John William Gamble.....	1	July 1, 1910	1,600	July 17, 1907
South Omaha.....	26,001	Nathaniel Marks Graham.....	3	July —, 1910	2,500	Feb. —, 1907
York.....	5,132	Walter Welles Stoner.....	3	July —, 1911	2,000	June —, 1903
NEVADA.						
Reno.....	4,500	W. E. Pruett.....	1	Sept. 1, 1908	2,500	—
NEW HAMPSHIRE.						
Berlin.....	8,886	George H. Whitcher.....	1	July 1, 1908	1,800	—
Claremont.....	6,498	William H. Cummings.....	(c)	(c)	(c)	—
Concord:						
Union district.....	19,623	Louis John Rundlett.....	1	July 1, 1910	2,200	Aug. —, 1888
Penacook district.....		George W. Sumner.....	1	July —, 1909	1,200	June —, 1905
Dover.....	13,207	Austin Hubert Keyes.....	1	Feb. —, 1910	2,000	Feb. —, 1904
Exeter.....	4,922	Harry E. Walker ^d	(c)	(c)	(c)	—
Franklin.....	5,946	William H. Slayton.....	1	June —, 1909	1,200	Sept. —, 1907
Keene (Union dis- trict).....	9,165	George A. Keith.....	1	June 30, 1910	1,500	July 1, 1905
Laconia.....	8,042	Joseph H. Blaisdell.....	1	do.....	1,300	Aug. —, 1897
Manchester.....	56,987	Charles W. Bickford.....	2	do.....	2,300	July 1, 1900
Nashua.....	23,898	James H. Fassett.....	1	June 30, 1910	2,000	Mar. —, 1893
Portsmouth.....	10,537	Ernest Leroy Silver.....	1	July 31, 1909	1,850	Dec. —, 1904
Rochester.....	8,466	Andrew Jackson.....	1	July —, 1908	1,000	—
Somersworth.....	7,032	Royal E. Gould.....	1	Aug. 31, 1909	—	Sept. 1, 1908
NEW JERSEY.						
Asbury Park.....	4,148	Fred Strong Shepherd.....	5	Aug. 31, 1913	3,000	Sept. 1, 1899
Atlantic City.....	27,838	Charles B. Boyer.....	3	July —, 1910	3,000	—
Bayonne.....	32,722	James H. Christie.....	3	Sept. —, 1909	3,000	—, 1900
Bloomfield.....	9,668	George Morris.....	4	July 1, 1913	3,500	Dec. —, 1904
Boonton.....	3,901	Milo Pearson Reagle.....	1	June —, 1910	1,600	June —, 1903
Bordentown.....	4,110	William Macfarland.....	3	June 30, 1909	1,500	—
Bridgeton.....	13,913	Edgar J. Hitchner.....	1	July —, 1909	1,200	—, 1893
Burlington.....	7,392	Wilbur Watts ^a	—	—	—	—
Camden.....	75,935	James E. Bryan.....	3	Dec. 31, 1909	3,500	Sept. —, 1899
Dover.....	5,938	Wildy Victor Singer.....	1	June 30, 1909	1,800	Mar. —, 1908
East Orange.....	21,506	Vernon L. Davey.....	(c)	(c)	4,250	July —, 1890
Elizabeth.....	52,130	Richard E. Clement.....	7	June 30, 1914	3,600	July 2, 1907
Englewood.....	6,253	Elmer Charles Sherman.....	3	June 30, 1911	3,300	July 1, 1904
Garfield.....	3,504	William Henry Steegar.....	1	June 30, 1909	1,650	Sept. —, 1907
Gloucester City.....	6,840	W. F. Burns ^b	—	—	—	—

^a For 1906-7; no later information.^c No data.^e Indefinite.^b For 1907-8.^d Principal of high school.

II.—CITY SUPERINTENDENTS—Continued.

City.	Popula- tion. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
NEW JERSEY—CON.						
Hackensack.....	9,443	Bert Emery Merriam.....	1	June 30, 1909	\$2,500	June —, 1908
Hammonton.....	3,481	Newton Clark Holdridge.....	1	June —, 1909	2,000	—, 1897
Harrison.....	10,596	John Dwyer.....	2	Mar. 30, 1910	2,100	
Hoboken.....	59,364	Abraham Jay Demarest.....	(a)	(a)	3,500	Apr. 17, 1897
Irvington.....	5,255	Frank H. Morrell.....	3	June 30, 1911	2,500	Sept. —, 1875
Jersey City.....	206,433	Henry Snyder.....	(b)	(b)		
Kearney (P. O., Ar- lington).....	10,896	Herman Dressel, jr.....	1	June 30, 1909	2,650	July 31, 1907
Lambertville.....	4,637	Louis E. Boutwell.....	1	June —, 1909	1,500	Apr. —, 1907
Long Branch.....	8,872	Christopher Gregory.....	(a)	(a)	(b)	
Madison.....	3,754	Marcellus Oakyc.....	(b)	(b)	(b)	
Millville.....	10,583	Harry F. Stauffer.....	1	June —, 1909	1,800	June —, 1900
Montclair.....	13,962	Randall Spaulding.....	(a)	(a)	4,250	Sept. —, 1874
Morristown.....	11,267	W. L. R. Haven.....	(b)	(b)	(b)	
Newark.....	246,070	Addison Brown Poland.....	(a)	(a)	5,500	Mar. 1, 1901
New Brunswick.....	20,006	William Clinton Armstrong.....	1	June 30, 1910	2,500	Jan. 1, 1899
Newton.....	4,376	J. Burton Wiley.....	1	do.....	1,800	Mar. 15, 1908
North Plainfield.....	5,009	Henry C. Krebs.....	1	June 30, 1909	2,000	July 1, 1905
Orange.....	24,141	James Gilbert Riggs.....	3	June 30, 1911	3,500	July 1, 1906
Passaic.....	27,777	Oscar I. Woodley.....	2	Aug. 31, 1909	3,500	Sept. —, 1904
Paterson.....	105,171	John R. Wilson.....	(σ)	(a)	3,600	Sept. —, 1906
Perth Amboy.....	17,699	Samuel E. Shull.....	(a)	(a)	3,000	—, 1895
Phillipsburg.....	10,052	L. O. Beers.....	(b)	(b)	(b)	
Plainfield.....	15,369	Henry Martin Maxson.....	(b)	(b)	(b)	
Princeton.....	3,899	Mabel Tilden Vanderbilt.....	1	June —, 1909	1,650	Feb. —, 1906
Rahway.....	15,369	William James Bickett.....	(a)	(a)	3,000	Sept. —, 1906
Red Bank.....	5,428	Stephen V. Arrowsmith.....	1	July 1, 1909	2,475	Mar. —, 1897
Ridgewood.....	2,685	William T. Whitney.....	1	June 20, 1909	2,500	Sept. —, 1905
Rutherford.....	4,411	Charles J. Majory.....	1	June 30, 1909	2,000	Sept. 14, 1908
Salem.....	5,811	Oscar P. Barr.....	1	Aug. —, 1910	1,600	Aug. 6, 1909
Somerville.....	4,843	William Alfred Ackerman.....	1	June 30, 1910	2,300	May —, 1905
South Amboy.....	6,349	Russell Martin Fitch.....	1	June 30, 1909	1,320	Nov. —, 1895
South Orange.....	4,608	Henry Ward Foster.....	3	do.....	3,000	July —, 1900
Summit.....	5,302	Miss Louise Connolly.....	1	June 30, 1908	2,400	
Town of Union (P. O. Weehawken).....	15,187	Otto Ortel.....	(a)	(a)	3,000	Sept. —, 1886
Trenton.....	73,307	Ebenezer Mackey.....	(a)	(a)		
Vineland.....	4,370	J. J. Unger.....	1	June 10, 1910	1,705	June —, 1897
Weehawken.....	5,325	(b)				
Westfield.....	4,328	J. J. Savitz.....	(a)	(a)	2,800	Sept. 1, 1907
West Hoboken.....	23,094	Elliott J. Tomlinson.....	(a)	(a)		
West New York.....	5,267	Jared Barhite.....	(b)	(b)		
West Orange.....	6,889	Alton Harvey Sherman.....	3	June —, 1911	3,200	June —, 1904
Woodbury.....	4,087	Henry C. Dixon.....	3	—, 1910	1,800	—, 1906
NEW MEXICO.						
Albuquerque.....	6,238	Wellington D. Sterling.....	1	June 30, 1909	2,200	
Raton.....	3,540	Thomas W. Conway.....	1	June 1, 1909	1,800	June 28, 1908
Santa Fe.....	5,603	James Alpheus Wood.....	1	July 1, 1910	1,380	June —, 1899
NEW YORK.						
Albany.....	94,151	Charles Wadsworth Cole.....	(a)	(a)	3,000	Feb. 1, 1878
Albion.....	4,477	Willis G. Carmer.....	1	Aug. 1, 1909	1,800	Aug. 1, 1899
Amsterdam.....	20,929	Harrison T. Morrow.....	3	Sept. —, 1909	3,000	—, 1900
Auburn.....	30,345	Alfred C. Thompson.....	(a)	(a)	3,000	Aug. 1, 1905
Ballston Spa.....	3,923	Adelbert A. Lavery.....	1	July 1, 1909	1,400	June —, 1898
Batavia.....	9,180	John Kennedy.....	1	Aug. 31, 1909	2,000	Oct. 1, 1890
Bath.....	4,994	Floyd Monroe Fernald.....	1	June 26, 1909	1,500	Apr. —, 1907
Binghamton.....	39,647	Joseph Edward Banta.....	(a)	(a)	2,800	Sept. —, 1905
Buffalo.....	352,387	Henry Pendexter Emerson.....	4	Dec. 31, 1911	5,000	Jan. 1, 1893
Canandaigua.....	6,151	Luther Norton Steele.....	1	July 31, 1909	2,100	Aug. 1, 1907
Catskill.....	5,484	J. T. P. Calkins.....	1	Aug. 1, 1910	2,000	Aug. 1, 1904
Cohoes.....	23,910	Edward Hayward.....	4	July 1, 1909	2,000	
Corning:						
District No. 9.....	11,061	Leigh Richmond Hunt.....	1	July 31, 1909	2,750	July 1, 1892
District No. 13.....		A. M. Blodgett.....	1	June —, 1909	1,600	Sept. —, 1897
Cortland.....	9,014	Ferdinand E. Smith.....	3	Aug. 1, 1912	2,400	July 1, 1896
Dansville.....	3,633	James Wells Reed.....	1	June 24, 1910	1,400	Sept. —, 1908
Dunkirk.....	11,616	Delmer Elliott Batcheller.....	1	July 1, 1910	2,500	Aug. 15, 1908
Elmira.....	35,672	William J. Deans.....	(a)	(a)	2,350	July 1, 1906
Fishkill Landing.....	3,673	G. F. Du Bois.....	1	July 1, 1910	1,600	Sept. —, 1907
Fredonia.....	4,127	William B. Blaisdell.....	(b)	(b)	(b)	

a Indefinite.

b No data.

c Supervising principal.

d For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
NEW YORK—con.						
Fulton.....	5,281	James R. Fairgrieve.....	2	Dec. 31, 1909	\$2,400	Jan. —, 1904
Geneva.....	10,433	William Henry Truesdale.....	(a)	(a)	2,500	Aug. —, 1890
Glens Falls.....	12,613	E. W. Griffith.....	(b)	(b)	(b)	—, —, —
Gloversville.....	18,349	James A. Estee.....	1	July 31, 1910	2,600	—, —, 1890
Gouverneur.....	3,689	John B. Laidlaw.....	1	July 31, 1910	1,800	Sept. —, 1906
Granville.....	2,700	R. E. Brown.....	1	June 25, 1909	1,500	Sept. 1, 1893
Green Island.....	4,770	James Heatley.....	(b)	(b)	(b)	—, —, —
Haverstraw.....	5,935	Luther O. Markham.....	1	Sept. —, 1909	1,800	Sept. —, 1888
Hempstead.....	3,582	Hannibal Hamlin Chapman.....	1	June —, 1909	2,300	Sept. —, 1904
Herkimer.....	5,555	Charles L. Mosher.....	1	Sept. —, 1910	2,000	—, —, 1905
Hoosick Falls.....	5,671	Clyde L. Harvey.....	1	June 24, 1910	1,650	Mar. —, 1905
Hornell.....	11,918	Elmer S. Redman.....	1	Sept. 1, 1910	2,500	Aug. 1, 1898
Hudson.....	9,528	Charles Spencer Williams.....	1	Sept. —, 1909	2,200	Sept. 1, 1904
Ilion.....	5,138	Frank De Witt Warren.....	1	June —, 1910	1,900	Nov. 1, 1905
Ithaca.....	13,136	Frank David Boynton.....	5	July 1, 1910	3,600	June —, 1900
Jamestown.....	22,892	Rovillus R. Rogers.....	3	—, —, 1911	2,500	Mar. —, 1890
Johnstown.....	10,130	Frank W. Jennings.....	1	Aug. —, 1910	2,200	July —, 1898
Kingston.....	24,535	Sylvester R. Shear.....	(a)	(a)	2,800	Apr. 22, 1902
Lancaster.....	3,750	Levi C. Higley.....	1	June 24, 1910	1,500	May 4, 1907
Lansingburg.....	12,595	George Franklin Sawyer.....	1	Aug. 31, 1910	1,800	Sept. —, 1892
Lawrence.....	—	Fred De L. King.....	1	June 30, 1909	2,400	Do.
Lestershire.....	3,111	Frank M. Smith.....	1	July 30, 1909	1,700	—, —, 1903
Little Falls.....	10,381	Eugene Benjamin Callahan.....	(a)	(a)	2,000	Sept. 3, 1908
Lockport.....	16,581	Emmet Belknap.....	1	Aug. 31, 1910	2,400	June —, 1889
Lyons.....	4,300	Worthy Hanks Kinney.....	1	Aug. —, 1909	1,800	Aug. —, 1888
Malone.....	5,935	Lamont F. Hodge.....	3	Aug. 1, 1911	2,000	Apr. —, 1908
Mamaroneck.....	4,722	George J. McAndrew.....	1	Sept. 1, 1910	2,400	May —, 1902
Matteawan.....	5,807	Norman C. Gile.....	—	—	—	—
Mechanicsville.....	4,695	L. B. Blakeman.....	1	Aug. 31, 1909	1,500	Aug. 8, 1888
Medina.....	4,716	James C. Van Etten.....	1	June 25, 1909	1,800	Apr. 1, 1906
Middletown.....	14,522	James Frederick Tuthill.....	1	June 25, 1910	2,400	—, —, 1891
Mount Vernon.....	20,346	Edwin C. Broome.....	(a)	(a)	3,600	Apr. 1, 1909
Newark.....	4,578	William M. Fort.....	1	June —, 1909	1,750	Aug. —, 1907
Newburgh.....	24,943	James M. Crane.....	1	Mar. —, 1909	2,200	Mar. —, 1901
New Rochelle.....	14,720	Albert Leonard.....	3	Aug. 31, 1910	4,000	Mar. 12, 1907
New York.....	3,437,202	William Henry Maxwell.....	6	Mar. —, 1910	10,000	Mar. —, 1898
Niagara Falls.....	19,457	Reuben A. Taylor.....	1	July 31, 1909	2,500	Aug. —, 1901
North Tarrytown.....	4,241	Charles Leslie Jaynes.....	1	June 18, 1909	1,800	May —, 1907
North Tonawanda.....	9,069	Richard Addison Searing.....	3	July —, 1909	2,500	Apr. —, 1904
Norwich.....	5,766	Stanford Jay Gibson.....	1	June 18, 1909	1,800	—, —, 1899
Nyack.....	4,275	Edward J. Bonner.....	1	do.....	2,000	Mar. 20, 1908
Ogdensburg.....	12,633	Horace H. Southwick.....	3	Sept. 1, 1911	1,900	Sept. 1, 1902
Olean.....	9,462	Samuel J. Slawson.....	1	Aug. 1, 1908	2,500	Feb. 1, 1907
Oneida.....	6,364	George Rowe Staley.....	1	July 31, 1910	1,600	May 17, 1909
Oneonta.....	7,147	Harry Westcott Rockwell.....	1	June —, 1910	2,000	Feb. —, 1906
Ossining.....	7,939	W. H. Ryan.....	4	June —, 1911	2,500	—, —, —
Oswego.....	22,199	George E. Bullis.....	(b)	(b)	(b)	—, —, —
Owego.....	5,039	Isaac Squire Carroll.....	1	Aug. 1, 1910	1,300	Aug. 1, 1908
Patchogue.....	2,926	Wellington E. Gordon.....	1	do.....	2,000	June —, 1881
Peekskill.....	—	—	—	—	—	—
District No. 7 (Drumhill).	10,358	William J. Millar.....	1	Aug. 31, 1910	2,000	Nov. 1, 1907
District No. 8 (Oaksides).		Alexander D. Dunbar.....	(a)	(a)	2,200	—, —, 1885
Penn Yan.....	4,650	N. Winton Palmer.....	1	July 31, 1910	1,200	Jan. 1, 1906
Plattsburg.....	8,434	Frank K. Watson.....	1	do.....	2,000	Oct. —, 1905
Port Chester.....	7,440	Edgar G. Lautman.....	3	July 1, 1910	2,800	June —, 1898
Port Jervis.....	9,385	John M. Dolph.....	1	July 31, 1909	1,900	—, —, 1904
Potsdam.....	3,843	Lewis E. Roberts.....	1	June —, 1910	1,300	Sept. —, 1905
Poughkeepsie.....	24,029	William Alexander Smith.....	(a)	(a)	2,800	July —, 1902
Rensselaer.....	7,466	Austin R. Coulson.....	2	July 31, 1910	1,500	Feb. —, 1903
Rochester.....	162,608	Clarence Franklin Carroll.....	4	July 14, 1910	5,000	July 14, 1903
Rome.....	15,343	Lewis N. Crane.....	1	Sept. 1, 1909	2,300	Sept. —, 1902
Rye.....	3,603	Forrest T. Shults.....	3	June —, 1910	2,100	Do.
Salamanca.....	4,251	Thomas Stone Bell.....	1	do.....	1,800	Sept. —, 1892
Sandy Hill.....	4,473	Frances A. Tefft.....	(a)	(a)	1,600	Sept. —, 1905
Saratoga Springs.....	12,409	Thomas R. Knell.....	(a)	(a)	2,250	Sept. —, 1892
Schenectady.....	31,682	A. R. Brubacher.....	(a)	(a)	3,000	July 1, 1908
Seneca Falls.....	6,519	Frederick John Medden.....	1	June —, 1908	1,600	Sept. —, 1908
Solvay.....	3,493	Charles O. Richards.....	1	Sept. —, 1908	1,800	—, —, 1900
Syracuse.....	108,374	Andrew Burr Blodgett.....	4	Jan. 1, 1912	4,000	Mar. 8, 1889
Tarrytown.....	4,770	Leslie V. Case.....	1	June —, 1909	2,700	—, —, 1905
Tonawanda.....	7,421	Frank K. Sutley.....	3	Aug. 31, 1911	2,200	—, —, 1904
Troy.....	60,651	Edward Edwards, Jr.....	(a)	(a)	3,000	Feb. 4, 1908
Utica.....	56,383	Martin G. Benedict.....	(a)	(a)	3,300	May 24, 1904

a Indefinite.

b No data.

c For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
NEW YORK—con.						
Waterford.....	3,146	George H. Harten.....	1	July 31, 1909	\$1,800	Sept. —, 1905
Waterloo.....	4,256	Dwight Brewster Williams ^a	1	June 25, 1910	1,500	June —, 1908
Watertown.....	21,696	Frank S. Tisdale.....	1	Aug. 1, 1910	2,500	July 19, 1900
Watervliet.....	14,321	Hugh H. Lansing.....	1	Aug. 31, 1909	1,800	Aug. —, 1907
Waverly.....	4,465	P. C. Meserve.....	1	June 24, 1909	1,300	Sept. —, 1908
Wellsville.....	3,556	Howard Griffith Burdge.....	1	July —, 1909	1,600	
West Seneca.....	5,363	A. E. Cook.....	2	July 1, 1910	1,500	Sept. —, 1907
Whitehall.....	4,377	George S. Ellis.....	1	June 30, 1910	1,700	July 1, 1907
White Plains.....	7,899	Charles Cornell Ramsay.....	1	Aug. 1, 1909	3,000	June 29, 1908
Yonkers.....	47,931	Charles Eugene Gorton.....	(b)	(b)	5,000	Nov. 1, 1883
NORTH CAROLINA.						
Asheville.....	14,694	Richard Joseph Tighe.....	1	Aug. 31, 1909	2,200	Aug. —, 1900
Burlington.....	3,692	Frank Harrison Curtiss.....	1	June 30, 1910	1,500	July 1, 1901
Charlotte.....	18,091	Alexander Graham c.....				
Concord.....	7,910	Jay D. Lentz.....	1	June 1, 1909	1,500	Jan. —, 1908
Durham.....	6,679	William Donald Carmichael.....	1	June 1, 1910	2,100	June 1, 1906
Elizabeth City.....	6,348	D. L. Sheep.....	(d)	(d)	(d)	
Fayetteville.....	4,670	J. A. Jones.....	1	May 19, 1908	1,600	
Gastonia.....	4,610	Joe S. Wray.....	1	May 31, 1910	1,500	Aug. —, 1901
Goldsboro.....	5,877	Joseph E. Avent.....	1	Aug. —, 1910	1,500	Aug. —, 1909
Greensboro.....	10,035	W. H. Swift c.....				
High Point.....	4,163	Harry Howell.....	1	June 30, 1910	1,500	July 8, 1908
Kinston.....	4,106	Bruce Craven.....	(d)	(d)	(d)	
Newbern.....	9,090	Harvey Bernard Craven.....	1	June 30, 1910	1,500	Sept. —, 1904
Raleigh.....	13,643	Francis Marion Harper.....	1	Sept. 1, 1909	2,000	Sept. 1, 1907
Salem (P. O., Win- ston-Salem).....	3,642	Wesley Bethel Speas c.....	2	July 1, 1909	950	July 6, 1903
Salisbury.....	6,277	Isaac C. Griffin.....	1	June 1, 1908	1,500	
Washington.....	4,842	Nathan Carter Newbold.....	1	June 30, 1909	1,500	July 29, 1908
Wilmington.....	20,976	John Jay Blair c.....				
Wilson.....	3,525	Charles Lee Coon.....	1	July 1, 1910	1,500	July 1, 1907
Winston (P. O., Winston-Salem).....	10,008	W. S. Snipes.....	1	May 30, 1909	1,650	June —, 1904
NORTH DAKOTA.						
Bismarck.....	3,319	Jesse Austin Tanner.....	1	June 10, 1909	1,700	May 13, 1908
Fargo.....	9,589	William E. Hoover.....	1	Aug. 1, 1910	2,600	Feb. —, 1906
Grand Forks.....	7,652	J. Nelson Kelly.....	1	June 30, 1909	3,000	July —, 1903
Jamestown.....	2,853	Arthur Griswold Crane.....	1	June —, 1909	1,800	July 26, 1907
Minot.....	1,277	Samuel Henry Wolf.....	3	June —, 1912	2,000	Sept. —, 1900
Valley City.....	2,446	George W. Hanna.....	1	June 30, 1909	2,000	July —, 1899
OHIO.						
Akron.....	42,728	H. V. Hotchkiss.....	5	Aug. 31, 1911	3,600	July 28, 1900
Alliance.....	8,974	John E. Morris.....	3	—, 1911	2,000	—, 1892
Ashland.....	4,087	John A. McDowell.....	1	Aug. 31, 1909	1,600	Sept. 4, 1908
Ashtabula.....	12,949	Elmer A. Hotchkiss.....	4	July 1, 1911	2,400	Mar. —, 1907
Barberton.....	4,354	James Montgomery Carr.....	2	Aug. —, 1909	1,650	June —, 1906
Barnesville.....	3,721	William R. Butcher.....	1	Aug. 31, 1909	1,500	May —, 1907
Bellaire.....	9,912	Wilson Hawkins.....	2	July 1, 1910	1,800	Do.
Bellefontaine.....	6,649	John W. MacKinnon.....	2	Aug. 31, 1909	1,700	Aug. —, 1900
Bellevue.....	4,101	Ellis Fulton Warner.....	2	(d)	1,600	Sept. —, 1886
Bowling Green.....	5,067	N. D. O. Wilson c.....	3	Sept. —, 1912	1,800	Aug. —, 1903
Bridgeport.....	3,963	Samuel A. Gillett.....	2	June —, 1909	1,800	—, 1904
Bucyrus.....	6,500	William Nelson Beetham.....	3	July —, 1910	1,700	July —, 1907
Cambridge.....	8,241	H. Z. Hobson.....	4	Sept. 1, 1911	1,650	
Canal Dover.....	5,422	Franklin Paul Gdiger.....	2	July 1, 1909	1,700	—, 1902
Canton.....	30,667	John K. Baxter.....	4	—, 1912	2,700	—, 1905
Chillicothe.....	12,976	F. C. Kirkendall.....	(d)	(d)	(d)	
Cincinnati.....	325,902	Frank B. Dyer.....	5	—, 1912	6,000	Aug. 12, 1903
Circleville.....	6,991	William Elmer Sealock.....	1	Sept. 1, 1909	1,650	May 21, 1908
Cleveland.....	381,768	William Harris Elson.....	5	Jan. 7, 1912	6,000	Apr. 30, 1906
Collinwood.....	3,639	Frank P. Whitney.....	1	—, 1910	1,900	Aug. —, 1901
Columbus.....	125,560	Jacob Albright Shawan.....	2	June 30, 1910	4,000	July 1, 1889
Conneaut.....	7,133	Calvin T. Northrop.....	5	July 1, 1910	2,000	July 1, 1902
Coshocton.....	6,473	C. E. Bryant.....	(d)	(d)	(d)	
Dayton.....	85,333	Edwin J. Brown.....	3	Sept 1, 1911	3,800	Aug. 21, 1908
Defiance.....	7,579	Henry B. Mullholand.....	4	Sept. 1, 1913	1,650	Feb. 20, 1909
Delaware.....	7,940	William McKendree Vance.....	4	Aug. 31, 1913	2,200	Sept. 1, 1906
Delphos.....	4,517	T. W. Shimp.....	1	Sept. —, 1908	1,600	

^a Supervising principal.^b Indefinite.^c For 1906-7; no later information.^d No data^e County superintendent.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
OHIO—continued.						
Dennison.....	3,763	W. H. Angela.....	1	Sept. —, 1909	\$2,000	May —, 1908
East Liverpool.....	16,485	Frederick Henry Warren.....	5	—, 1913	2,500	—, 1900
Elyria.....	8,791	William Raymond Comings.....				
Findlay.....	17,613	J. F. Smith.....	1	Sept. —, 1909	1,800	June 4, 1908
Fostoria.....	7,730	Rolland Ward Solomon.....	3	—, 1910	2,000	—, 1906
Fremont.....	8,439	J. E. Collins.....	3	Sept. 1, 1912	1,850	—, 1896
Galion.....	7,282	I. C. Guinther.....	2	July 1, 1910	1,800	July 1, 1905
Gallipolis.....	5,432	Harvey Evan Conard.....	2	—, 1909	1,500	
Greenfield.....	3,979	E. W. Patterson.....	1	July 1, 1910	1,700	Apr. 7, 1908
Greenville.....	5,501	James Jamison Martz.....	3	Aug. 1, 1911	3,000	Aug. —, 1903
Hamilton.....	23,914	Darrell Joyce.....	(b)	(b)	(b)	
Hillsboro.....	4,635	W. E. Arter.....	4	Aug. 31, 1909	2,000	May 24, 1897
Ironton.....	11,868	Sardine Presley Humphrey.....	3	June —, 1911	1,700	June —, 1881
Jackson.....	4,672	James Edgar Kinnison.....	2	July —, 1910	1,800	Nov. 22, 1907
Kent.....	4,541	Reed P. Clark.....				
Kenton.....	6,852	N. E. Hutchinson a.....	(b)	(b)	(b)	
Lancaster.....	8,991	H. A. Cassidy.....	1	June —, 1910	2,400	June —, 1905
Lima.....	21,723	John Davison.....	5	Aug. 1, 1913	2,500	May —, 1905
Lorain.....	16,028	Albert C. Eldredge.....	2	Sept. —, 1909	2,200	June —, 1907
Mansfield.....	17,640	Henry Harrison Helter.....	3	July —, 1911	2,400	Aug. —, 1902
Marietta.....	13,348	Jesse V. McMillan.....	2	Aug. 31, 1910	2,000	June —, 1901
Marion.....	11,862	Harrison L. Frank.....	2	Aug. 31, 1909	2,000	
Martins Ferry.....	7,760	Lewis Edwin York.....	3	Aug. 31, 1911	2,100	Sept. 1, 1904
Massillon.....	11,944	C. L. Cronebaugh.....	3	Sept. 1, 1910	1,800	Apr. —, 1907
Miamisburg.....	3,941	William Tecumseh Trump.....	2	July —, 1911	2,350	
Middletown.....	9,215	Ralph Richard Upton.....	3	Sept. —, 1910	2,000	Jan. —, 1907
Mount Vernon.....	6,633	John S. Alan.....	5	Sept. 1, 1910	1,700	Jan. 4, 1900
Nelsonville.....	5,421	Aaron Grady.....	2	Sept. —, 1910	2,200	June —, 1904
Newark.....	18,157	Joshua Dean Simkins.....	3	Aug. 31, 1911	2,000	Sept. 1, 1893
Newburg.....	5,909	B. F. Stevenson c.....	2	Sept. 1, 1910	2,220	Sept. 1, 1888
New Philadelphia.....	6,212	George C. Maurer.....	1	June 1, 1910	1,100	Apr. 20, 1909
Niles.....	7,468	Frank J. Roller.....	2	Aug. 31, 1910	2,000	—, 1891
North Baltimore.....	3,561	Uriah L. Light.....	1	Aug. 31, 1909	2,600	
Norwalk.....	7,074	Alexander D. Beechy.....	3	Sept. 1, 1911	1,350	June 15, 1908
Norwood.....	6,480	W. S. Cadman.....	3	Sept. —, 1910	1,750	—, 1901
Oberlin.....	4,082	Howard L. Rawdon.....	2	Sept. 1, 1909	2,000	
Painesville.....	5,024	Franklin H. Kendall.....	1	July 1, 1909	2,100	Feb. 15, 1908
Piqua.....	12,172	J. Reuben Beachler.....	(b)	(b)	(b)	
Pomeroy.....	4,639	Frank Appel.....	4	June —, 1911	1,800	Sept. —, 1906
Portsmouth.....	17,870	Edward O. Trescott.....	2	Aug. 31, 1909	1,550	Sept. —, 1898
Ravenna.....	4,003	U. L. Monce.....	3	June 1, 1911	1,400	June 1, 1907
St. Bernard.....	3,384	Charles Curtis McBroom.....	2	Aug. 31, 1910	2,000	—, 1900
St. Marys.....	5,359	J. S. Johnson.....	4	Aug. 31, 1909	2,600	Aug. 31, 1889
Salem.....	7,582	Homer B. Williams.....	4	Sept. —, 1911	1,500	Mar. —, 1905
Sandusky.....	19,664	Samuel H. Maharry.....	3	Sept. 1, 1911	1,950	Aug. —, 1902
Shelby.....	4,685	Herbert R. McVay.....	5	Aug. 31, 1912	3,000	May —, 1894
Sidney.....	5,688	Carey Boggess.....	1	Aug. 31, 1908	2,300	
Springfield.....	38,253	Robert Louis Ervin.....	5	Aug. —, 1912	1,800	Aug. —, 1900
Steubenville.....	14,349	C. A. Krout.....	(b)	(b)	(b)	
Tiffin.....	10,989	W. B. Guitteau.....	2	July 1, 1910	1,650	July —, 1903
Toledo.....	131,822	Samuel Kennedy Mardes.....	3	Aug. —, 1910	1,900	Aug. —, 1906
Toronto.....	3,626	Charles W. Cookson.....	3	—, 1911	1,350	—, 1901
Troy.....	5,881	L. E. Everett.....	3	—, 1910	1,800	—, 1901
Uhrichsville.....	4,582	I. N. Keyser.....	5	Sept. —, 1910	1,800	—, 1898
Urbana.....	6,808	J. P. Sharkey.....	2	Aug. 31, 1911	2,000	Feb. 6, 1909
Van Wert.....	6,422	Frank Eugene Reynolds.....	5	Aug. 1, 1910	2,500	
Wapakoneta.....	3,915	Charles E. Carey.....	2	Aug. 31, 1909	1,800	Sept. 1, 1904
Warren.....	8,529	James Todd Tuttle.....	3	do.....	1,500	
Washington C. H.....	5,751	Elmer Sheridan McCall.....	1	Sept. 1, 1910	1,800	May —, 1909
Wellston.....	8,045	Arthur D. Horton.....	3	Sept. 1, 1909	1,675	Sept. 1, 1904
Wellsville.....	6,146	Edwin P. West.....				
Wilmingtton.....	3,613	E. L. Thompson c.....	3	Sept. 30, 1911	2,000	June —, 1881
Wooster.....	6,063	Edwin Bruce Cox.....	5	Sept. 1, 1910	3,500	July 7, 1892
Xenia.....	8,696	Novetus Holland Chaney.....	4	July —, 1912	2,500	July 1, 1878
Youngstown.....	44,885	William D. Lash.....				
Zanesville.....	23,538					
OKLAHOMA.						
Ardmore.....	5,681	Charles Evans.....	2	May 1, 1911	2,200	Apr. 1, 1905
Chickasha.....	3,209	William F. Ramey.....	1	June 30, 1910	1,800	May 25, 1908
Durant.....	3,209	Walter H. Echols.....	1	July 31, 1909	1,200	July 6, 1908
El Reno.....	3,383	Frederick Noble Howell.....	1	May 31, 1909	1,650	June —, 1900
Enid.....	3,444	Thomas Walter Butcher.....	1	July 1, 1910	2,500	May —, 1909
Guthrie.....	10,006	William S. Calvert.....	1	May 1, 1910	1,800	Feb. 1, 1909

a For 1907-8.

b No data.

c For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
OKLAHOMA—cont'd.						
Lawton.....		Thomas Burley Rybolt.....	1	May 31, 1909	\$1,350	
McAlester.....	3,479	William Gay.....	1	do.....	1,800	June —, 1900
Muskogee.....	4,254	Edwin S. Monroe.....	(a)	(a)	(a)	
Oklahoma City.....	10,037	John Blackstone Taylor.....	1	July 1, 1908	2,200	
Perry.....	3,351	S. J. Creswell.....	1	May 21, 1909	1,200	May —, 1908
Ponca.....	2,528	Richard E. Tope.....	2	July 31, 1910	1,500	June 20, 1906
Shawnee.....	3,462	Scott Glen.....	2	July 1, 1910	2,000	July 1, 1905
Tulsa.....		Joseph G. Masters.....	1	June 30, 1909	1,800	Mar. —, 1906
OREGON.						
Astoria.....	8,381	John Gray Imel.....	1	Aug. 1, 1910	1,500	July 1, 1909
Baker City.....	6,663	J. A. Churchill.....	1	May 30, 1909	2,200	—, 1892
Eugene.....	3,236	Guy Cadwallader Stockton..	1	June 15, 1909	1,500	Sept. —, 1908
Pendleton.....	4,406	J. S. Landers.....	1	Sept. 1, 1910	1,900	Dec. —, 1906
Portland.....	90,426	Frank Rigler.....	(a)	(a)	(a)	
Salem.....	4,258	James M. Powers.....	1	July 1, 1909	1,650	July 1, 1905
The Dalles.....	3,542	Arthur C. Strange.....	1	June —, 1910	1,650	May —, 1908
PENNSYLVANIA.						
Allegheny.....	129,896	W. Espey Albig.....	1	June —, 1910	2,050	June —, 1909
Allentown.....	35,416	Francis Dimmick Raub.....	3	—, 1911	2,500	—, 1893
Alliance (P. O., Siegfried).		William David Landis.....	3	June —, 1911	1,400	May —, 1908
Altona.....	38,973	Henry Houston Balsh.....	3	do.....	2,400	Aug. —, 1908
Archbold.....	5,396	William A. Kelly.....	3	May 31, 1910	1,500	June —, 1904
Ashland.....	6,438	William C. Estler.....	3	May —, 1911	1,500	Aug. —, 1888
Ashley (Sta., Wilkes-Barre).	4,046	A. P. Cope.....	1	June —, 1910	1,000	July —, 1909
Athens.....	3,749	George Edgar Rogers.....	1	June 10, 1910	1,500	June —, 1905
Bangor.....	4,106	John W. Gruver.....	3	June —, 1911	1,500	—, 1905
Beaver Falls.....	10,054	Andrew Lester.....	3	do.....	1,800	May —, 1908
Bellefonte.....	4,216	John D. Meyer.....	3	do.....	1,500	June —, 1905
Bellevue.....	3,416	Curtis C. Williamson.....	1	June —, 1909	2,050	June —, 1894
Berwick.....	3,916	James Garfield Sigman.....	1	do.....	1,300	Jan. —, 1907
Bethlehem.....	7,293	Fred Woods Robbins.....	3	June —, 1911	2,000	Aug. —, 1900
Blakely.....	3,915	H. B. Anthony.....	1	Sept. —, 1909	900	Sept. —, 1902
Bloomsburg.....	6,170	Lloyd Parvin Sterner.....	3	June —, 1911	1,600	June —, 1891
Braddock.....	15,654	Grant Norris.....	3	do.....	2,400	May —, 1908
Bradford.....	15,029	E. E. Schermerhorn.....	(a)	(a)	(a)	
Bristol.....	7,104	Louise Dilworth Boggs.....	3	May —, 1911	1,000	June —, 1897
Butler.....	10,853	John A. Gibson.....	3	June —, 1911	2,600	June —, 1896
Carbondale.....	13,536	Thomas L. Gilmartin.....				
Carlisle.....	9,626	John C. Wagner.....	3	June —, 1911	1,550	July —, 1903
Carnegie.....	7,330	William Stewart Bryan.....	1	June —, 1909	1,800	Aug. —, 1896
Catasauqua.....	3,963	H. J. Reinhard.....	3	June —, 1912	1,450	Mar. —, 1899
Chambersburg.....	8,864	Samuel Gelwix.....	3	June —, 1911	1,200	—, 1897
Charlert.....	5,930	James G. Pentz.....				
Chester.....	33,988	Thomas Sessions Cole.....	3	June —, 1911	2,200	Oct. —, 1906
Clearfield.....	5,081	Louden F. Benchoff.....	1	June —, 1910	1,500	
Coatesville.....	5,721	William T. Gordon.....				
Columbia.....	12,316	Daniel Fleisher.....	3	June —, 1911	1,600	Dec. —, 1898
Connellsville.....	7,160	Walter S. Diefenbaugh.....	3	do.....	1,800	June —, 1907
Conshohocken.....	5,762	Elmer Bergey Zieher.....	3	do.....	1,600	Feb. —, 1903
Carry.....	5,369	Virgil Guilford Curtis.....	3	—, 1911	1,600	—, 1906
Danville.....	8,042	Daniel N. Diefenbacher.....	3	June —, 1911	1,200	July —, 1907
Darby.....	3,429	Charles P. Sweeney.....	1	June —, 1909	1,500	July —, 1898
Dickson City.....	4,948	James P. Wilson.....	3	Aug. —, 1909	1,020	Aug. —, 1906
Donora.....		O. E. Rose.....	1	June —, 1909		June —, 1907
Dubois.....	9,375	J. H. Alleman.....	3	June —, 1911	2,000	June —, 1902
Dunmore.....	12,583	Charles F. Hoban.....	3	June —, 1908	1,800	
Duquesne.....	9,036	Clyde Henry Wolford.....	1	June —, 1909	2,100	Aug. —, 1906
Duryea.....		Frederick J. Regan.....	3	Aug. —, 1910	1,200	—, 1894
Easton.....	25,238	William White Cottingham.....	3	June —, 1911	2,000	Aug. —, 1853
Edwardsdale (P. O., Edwardsville Sta.)	5,165	James O. Herman.....	3	—, 1911	1,200	—, 1893
Erie.....	52,733	Henry Clay Missimer.....	3	June —, 1911	3,600	June —, 1890
Etna.....	5,384	J. Q. A. Irvine.....	3	June —, 1908	1,700	
Forest City.....	4,279	Floyd H. Taylor.....	1	May —, 1910	1,000	
Franklin.....	7,317	Nathan Pearl Kingsley.....	3	June —, 1911	2,000	—, 1877
Freeland.....	5,254	E. F. Hanlon.....				
Galeton.....		Arthur Bates Benn.....	1	June —, 1909	1,050	June —, 1906
Gilberton.....	4,373	(a)				

a No data.

b For 1907-8.

c Supervising principal.

d Principal.

e For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Popula- tion. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
PENNSYLVANIA— continued.						
Greensburg.....	6,508	Thomas S. March.....	3	June 1, 1911	\$3,000	Sept. —, 1904
Greenville.....	4,814	G. B. Gerberich.....	(a)	(a)	(a)	
Hanover.....	5,302	Joseph Caldwell Carey.....	3	June —, 1911	1,320	Sept. —, 1905
Harrisburg.....	50,167	Frederick E. Downes.....	3	do.....	2,800	May —, 1905
Hazleton.....	14,230	David Augustus Harman.....	3	do.....	2,500	June —, 1882
Homestead.....	12,554	James M. Norris.....	3	do.....	2,400	July —, 1903
Huntingdon.....	6,053	Edward R. Barclay.....	3	do.....	1,350	June —, 1902
Indiana.....	4,142	Frank Ernest Work.....	1	June —, 1910	1,350	June —, 1908
Jeannette.....	5,865	Theo. B. Shank.....	3	June —, 1911	1,800	June —, 1905
Jersey Shore.....	3,070	Henry Hackman Weber.....	1	May —, 1909	1,100	June —, 1900
Johnsborg.....	3,894	George W. Mitchell.....	1	do.....	1,400	
Johnstown.....	35,936	James Nicol Muir.....	3	June —, 1911	2,500	May —, 1908
Kane.....	5,296	T. E. Lytle.....	3	June —, 1908	1,750	
Kingston.....	3,846	George Evans ^b	1	Sept. 1, 1908	1,600	
Kittanning.....	3,902	Frank Wilbur Goodwin.....	3	June —, 1911	1,700	Mar. —, 1907
Knoxville.....	3,511	Milo H. Miller ^b	1	June —, 1909	1,800	July —, 1908
Lancaster.....	41,459	Robert Koch Buerhle.....	3	June —, 1911	2,000	June —, 1880
Lansford.....	4,888	Elmer E. Kuntz.....	3	do.....	1,500	July —, 1903
Latrobe.....	4,614	Arthur C. Klach.....	3	June —, 1910	2,000	Mar. —, 1905
Lebanon.....	17,628	Robert Thompson Adams.....	3	do.....	1,700	June —, 1899
Lehighton.....	4,629	Brinton McClellan Shull ^c	1	do.....	1,000	June —, 1908
Lewistown.....	4,451	William F. Kennedy.....	3	May —, 1911	1,400	
Lock Haven.....	7,210	Edward S. Ling.....	3	June —, 1911	1,200	Do.
Luzerne.....	3,817	Theron G. Osborne ^c	1	May —, 1909	1,200	Aug. —, 1901
McKeesport.....	34,227	Joseph Burdette Richey.....	3	June —, 1911	3,000	June —, 1902
McKees Rocks.....	6,352	Francis Hamilton Powers.....	3	do.....	2,250	June —, 1908
Mahanoy City.....	13,504	William Nelson Ehrhart.....	3	do.....	1,650	June —, 1896
Mauch Chunk.....	4,029	Halliday R. Jackson ^{c d}				
Meadville.....	10,291	Russell H. Bellows.....	3	June —, 1911	1,800	July 1, 1908
Meyersdale.....		William H. Kietchman ^c	3	do.....	1,200	
Middletown.....	5,608	Harry V. B. Garner.....	3	do.....	2,000	
Millvale (Sta. Al- legheeny).....	6,736	John C. R. Johnston ^b	1	June —, 1909	1,472	— —, 1898
Milton.....	6,175	William Andrew Wilson.....	3	May —, 1911	1,920	June —, 1905
Minersville.....	4,815	Wilbur Merrill Yeigust.....	3	June —, 1912	1,800	July —, 1908
Monessen.....	2,197	John H. Adams.....	1	June —, 1909	1,200	Sept. —, 1905
Monongahela City.....	5,173	Renwick G. Dean ^b	3	June —, 1910	1,700	Aug. —, 1906
Mount Carmel.....	13,179	Samuel Halsey Dean.....	3	June —, 1911	1,650	June —, 1893
Mount Pleasant.....	4,745	Eric Lee Gordy.....	1	June 1, 1908	1,500	
Nanticoke.....	12,116	A. P. Diffenderfer.....	3	June 1, 1911	2,400	Jan. 1, 1909
New Brighton.....	6,820	Clyde Chapman Green.....	3	June —, 1911	2,000	Aug. —, 1906
New Castle.....	28,339	Thomas A. Kimes.....	3	do.....	2,000	June —, 1905
New Kensington.....	4,665	A. D. Horton ^c	1	June —, 1909	1,620	— —, 1903
Norristown.....	22,265	Allen S. Martin.....	3	June —, 1911	2,500	Jan. —, 1906
North Braddock.....	6,535	John Lloyd Spittler ^c	1	June —, 1909	1,850	Sept. —, 1908
Oil City.....	13,264	James Joseph Palmer.....	3	June —, 1911	2,500	May —, 1908
Old Forge.....	5,630	Francis R. Coyne.....	3	May —, 1909	1,500	May —, 1905
Olyphant.....	6,180	Michael W. Cummings.....	3	June —, 1911	1,500	June —, 1903
Philadelphia.....	1,293,697	Martin G. Brumbaugh.....	1	Jan. —, 1910	7,500	July —, 1906
Phoenixville.....	9,196	Robert Edward Laramy.....	3	June —, 1911	1,800	June —, 1905
Pitcairn.....	2,601	Arthur Bates Benn.....	1	May —, 1910	1,350	June —, 1909
Pittsburg.....	321,616	Samuel Andrews.....	3	June —, 1911	6,000	June —, 1899
Pittston.....	12,556	Louis P. Bierly.....	1	June —, 1909	1,800	July —, 1898
Plymouth.....	13,649	Sherman Levi Smith.....	1	June —, 1910	1,600	Aug. 16, 1908
Pottstown.....	13,696	William W. Rupert.....	3	May —, 1911	1,600	May —, 1888
Pottsville.....	15,710	Stephen A. Thurlow.....	3	do.....	1,800	July —, 1906
Punxsutawney.....	4,375	Aubrey M. Hammers.....	3	June —, 1911	1,800	June —, 1907
Rankin.....	3,775	M. E. Thompson.....	(a)	(a)	(a)	
Reading.....	78,961	Charles S. Foss.....	3	June —, 1911	3,000	June —, 1902
Renovo.....	4,082	George A. Mincemoyer ^c	1	May —, 1910	1,200	June —, 1908
Ridgway.....	3,515	Walter Merton Peirce.....	3	June —, 1911	2,000	June —, 1897
Rochester.....	4,688	Orrin C. Lester.....	3	do.....	1,600	June —, 1904
St. Clair.....	4,638	Thomas G. Jones ^c				
St. Marys.....	4,295	J. J. Lynch.....	1	May 31, 1910	1,625	Sept. —, 1902
Sayre.....	5,243	Lewis Edwin De Laney.....	1	June —, 1910	1,400	Jan. —, 1908
Scottdale.....	4,261	Edgar Reed ^b	3	June —, 1911	1,800	June —, 1904
Scranton.....	102,026	George Howell.....	3	do.....	4,000	May —, 1908
Sewickley.....	3,568	Frank Evans Fickinger ^b	1	June —, 1909	2,200	Aug. —, 1903
Shamokin.....	18,202	Joseph Howerth.....	3	June —, 1911	2,000	Feb. —, 1902
Sharon.....	8,916	Samuel H. Hadley.....	3	do.....	2,000	June —, 1902
Sharpsburg.....	6,842	C. C. Kelso ^c	3	May 31, 1911	2,000	Apr. 1, 1900

^a No data.^b Principal.^c Supervising principal.^d For 1907-8.^e For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Popula- (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
PENNSYLVANIA— continued.						
Shenandoah.....	20,321	J. W. Cooper.....	3	June —, 1911	\$2,000	Aug. —, 1897
Slatington.....	3,773	James Wilson Snyder.....	3	do.....	1,500	Dec. —, 1906
South Bethlehem.....	13,241	Owen R. Wilt.....	3	June —, 1911	1,500	
South Sharon.....		L. R. Eckles.....	(a)	(a)	(a)	
Steelton.....	12,086	L. E. McGinness.....	3	June —, 1911	2,250	June —, 1888
Sunbury.....	9,810	Ira C. M. Ellenberger.....	3	May —, 1911	1,800	May —, 1908
Tamaqua.....	7,267	J. F. Derr.....	3	do.....	1,500	Do.
Tarentum.....	5,472	Andrew Doak Endsley.....	3	June —, 1911	2,300	June —, 1905
Taylor.....	4,215	Morgan J. Lloyd.....	3	do.....	1,500	June —, 1903
Titusville.....	8,244	Henry Pease.....	3	do.....	2,250	Apr. —, 1897
Towanda.....	4,663	John H. Humphries ^b	3	June —, 1910	1,500	June —, 1904
Turtle Creek.....	3,262	William A. Rodgers ^c	3	June 1, 1912	1,800	Oct. —, 1908
Tyrone.....	5,847	Henry Scott Fleck.....	3	May —, 1911	1,400	May —, 1908
Uniontown.....	7,344	Clifford John Scott.....	3	July —, 1911	2,300	June —, 1908
Warren.....	8,043	George P. Chatterton.....	1	June —, 1909	2,100	May —, 1908
Washington.....	7,670	William Krichbaum.....	3	June —, 1911	2,500	July —, 1904
Waynesboro.....	5,396	J. H. Reber.....	3	do.....	1,300	June —, 1899
West Chester.....	9,524	Addison L. Jones.....	3	do.....	2,500	June —, 1889
West Pittston.....	5,846	Louis F. Bierly ^b	1	June —, 1909	1,800	July —, 1898
Wilkes-Barre.....	51,721	James M. Coughlin.....	3	June —, 1911	4,000	
Wilkesburg.....	11,886	James L. Allison.....	3	May —, 1911	2,700	Aug. —, 1902
Williamsport.....	28,757	Charles Lose.....	3	June —, 1911	2,500	June —, 1896
Wilmerding.....	4,179	Charles Wilbert Shaffer ^c	1	June —, 1910	1,600	June —, 1908
Windber.....		Eden A. Hower ^b	1	June —, 1909	1,200	Do.
York.....	33,708	Atreus Wanner.....	3	June 1, 1911	2,250	June —, 1890
RHODE ISLAND.						
Bristol.....	6,901	John Post Reynolds.....	1	Sept. —, 1909	1,500	Sept. —, 1884
Burrillville.....	6,317	Leroy Gilbert Staples.....	1	June —, 1909	1,500	Dec. —, 1903
Central Falls.....	18,167	Wendell Axtell Mowry.....	1	Feb. —, 1910	2,000	June —, 1898
Coventry (P. O., Anthony).....	5,279	John Grafton Ulmer.....	1	Aug. —, 1909	1,500	Sept. —, 1907
Cranston.....	13,343	Valentine Almy.....	1	Nov. —, 1909	1,900	—, 1895
Cumberland.....	8,925	Charles Carroll Richardson.....	1	July —, 1910	1,550	July —, 1903
East Providence.....	12,138	Carroll R. Reed.....	1	Jan. —, 1910	1,500	Jan. —, 1909
Johnston.....	4,305	William Henry Starr.....	1	Nov. —, 1909	1,500	June —, 1898
Lincoln.....	8,937	Emerson Leland Adams.....	1	Dec. —, 1909	1,500	July 18, 1905
Newport.....	22,034	Herbert Warren Lull.....	1	Jan. —, 1910	3,000	June —, 1900
North Kingstown (P. O., Wickford).....	4,194	Frederic Dana Blake.....	1	June —, 1910	400	Nov. —, 1905
Pawtucket.....	39,231	Frank O. Draper.....	1	Dec. —, 1909	2,900	Mar. —, 1906
Providence.....	175,597	(a)				
South Kingstown (P. O., Kingston).....	4,972	B. E. Helme ^c				
Warren.....	5,108	Clair G. Persons.....	1	June —, 1909	1,800	May —, 1906
Warwick.....	21,316	Elwood T. Wyman.....	1	Dec. —, 1909	2,000	Dec. —, 1905
Westerly.....	7,541	William H. Holmes.....	1	July 1, 1910	2,500	July —, 1903
Woonsocket.....	28,204	Frank Emerson McFee.....	1	Jan. —, 1910	2,000	—, 1887
SOUTH CAROLINA.						
Abbeville.....	3,766	Leonard White Dick.....	1	May —, 1909	1,400	May —, 1904
Aiken.....	3,414	W. L. Brooker.....	1	June —, 1909	1,150	—, 1904
Anderson.....	5,498	Elliot Crayton McCants.....	2	June —, 1911	1,500	June —, 1907
Beaufort.....	4,110	Lueco Gunter.....	1	June 4, 1910	1,200	
Charleston.....	55,807	Henry P. Archer.....	4	Dec. —, 1911	2,500	Jan. —, 1885
Chester.....	4,075	William Herbert McNairy.....	1	—, 1910	1,500	—, 1906
Columbia.....	21,108	Ernest Shuler Dreher.....	1	Apr. —, 1909	2,000	May —, 1895
Florence.....	4,647	J. L. Mann ^c				
Gaffney.....	3,937	Will J. Francis.....	1	June 2, 1910	1,100	May —, 1908
Georgetown.....	4,138	William Clarence Bynum.....	1	June 18, 1909	1,200	Apr. —, 1907
Greenville.....	11,680	E. L. Hughes ^c				
Greenwood.....	4,824	Edward C. Coker ^c				
Laurens.....	4,029	Barney L. James.....	1	May —, 1909	1,500	Sept. —, 1908
Newberry.....	4,607	W. A. Stuckey.....	(a)	(a)	(a)	
Orangeburg.....	4,455	Albert Jerome Thackston.....	1	June —, 1909	1,700	July —, 1897
Rock Hill.....	5,485	John Coleman Cork.....	1	June 1, 1908	1,500	
Spartanburg.....	11,395	Frank Evans.....	1	June 3, 1910	1,800	Sept. 1, 1895
Sumter.....	5,673	Samuel H. Edmunds.....	(a)	(a)	2,400	—, 1895
Union.....	5,400	Davis Jeffries.....	1	May 29, 1908	1,400	

a No data.

b Supervising principal.

c Principal.

d Indefinite.

e For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
SOUTH DAKOTA.						
Aberdeen.....	4,087	William Peake Dunlevy.....	1	July —, 1909	\$1,650	Mar. —, 1908
Deadwood.....	3,498	Alexander Strachan.....	1	June —, 1909	2,000	Aug. —, 1890
Lead.....	6,210	Anson Hardin Bigelow.....	2	July —, 1910	3,000	May —, 1908
Mitchell.....	4,055	Freeman Hugh Hoff.....	1	July 1, 1910	1,800	June —, 1903
Sioux Falls.....	10,266	Archibald Arnott McDonald.....	1	do.....	2,033	July —, 1907
Watertown.....	3,352	Lester Burr Parsons.....	1	June —, 1909	1,700	Sept. —, 1907
Yankton.....	4,125	Rufus Clark Shellenbarger.....	1	do.....	1,800	May —, 1903
TENNESSEE.						
Bristol.....	5,271	Samuel Garland Auspach.....	1	June 30, 1910	1,500	May —, 1907
Chattanooga.....	30,154	Sidney Gordon Gilbreath.....	3	July —, 1911	2,500	Aug. —, 1903
Clarksville.....	9,431	Perry Lee Harned.....	1	June —, 1909	1,800	Apr. —, 1906
Cleveland.....	3,858	D. C. Arnold.....	(a)	(a)	(a)	
Columbia.....	6,052	William Eugene Bostick.....	1	June —, 1909	1,200	June —, 1894
Dyersburg.....	3,647	Clarence M. Walker.....	1	May 31, 1908	1,125	
Harriman.....	3,442	J. V. Rymer.....	1	May 28, 1909	1,000	
Jackson.....	14,511	Gentry Richard McGee.....	1	Aug. —, 1910	1,800	Sept. —, 1903
Johnson City.....	4,645	Tyler Elliott Utterbach.....	1	Aug. —, 1909	1,500	Aug. —, 1908
Knoxville.....	32,637	Seymour A. Mynders.....	2	June —, 1909	2,500	June —, 1907
Memphis.....	102,320	Thomas Pearce Bailey.....	2	Aug. 10, 1911	3,600	Aug. 11, 1909
Murfreesboro.....	3,999	J. W. W. Daniels ^b				
Nashville.....	80,865	Henri Carleton Weber.....	5	June —, 1910	3,000	June —, 1905
TEXAS.						
Austin.....	22,258	A. N. McCallum ^c				
Beaumont.....	9,427	Henry Franklin Triplett.....	2	July —, 1910	2,500	July —, 1903
Belton.....	3,700	James Beck Hubbard.....	1	June —, 1909	2,000	June —, 1905
Bonham.....	5,042	I. W. Evans.....	1	May 29, 1908	1,500	
Brenham.....	5,968	Peyton Irving, Jr.....	1	Sept. —, 1910	1,800	— —, 1906
Brownsville.....	5,308	Ignatius L. Candler.....	2	May 30, 1908	1,200	
Brownwood.....	3,965	George H. Carpenter.....	2	Sept. —, 1910	1,800	Sept. —, 1903
Cleburne.....	7,493	Robert Green Hall.....	1	July —, 1910	2,100	Apr. —, 1907
Corpus Christi.....	4,703	Charles Walton Crossley.....	2	Aug. 31, 1908	1,800	
Corsicana.....	9,313	John Edward Blair.....	1	July —, 1909	2,200	June —, 1908
Dallas.....	42,638	Arthur Lefevre.....	2	July 1, 1911	3,600	Aug. 15, 1908
Denison.....	11,807	Frank B. Hughes.....	1	June —, 1909	1,800	Sept. —, 1903
Denton.....	4,187	J. S. Carlisle.....	2	May —, 1910	2,000	May —, 1898
El Paso.....	15,906	Frank M. Martin.....	2	June —, 1910	3,000	June —, 1908
Ennis.....	4,919	Samuel Alexander Wyatt.....	1	May 15, 1908	1,500	
Fort Worth.....	26,688	Walter D. Williams ^c				
Gainesville.....	7,874	Edward F. Comegys.....	1	May —, 1909	2,160	July —, 1891
Galveston.....	37,789	John William Hopkins.....	1	June 1, 1910	3,600	June —, 1895
Gonzales.....	4,297	Miss Rozelle Nicholson.....	1	May 19, 1910	1,200	May —, 1907
Greenville.....	6,860	Louis Clyde Gee.....	1	July 31, 1910	1,800	Aug. —, 1907
Hillsboro.....	5,346	Thomas Dudley Brooks.....	1	July 31, 1908	1,320	
Houston.....	44,633	Paul Whitfield Horn.....	2	June —, 1910	3,600	June —, 1904
Laredo.....	13,429	(a).....				
McKinney.....	4,342	J. H. Hill.....	1	May —, 1910	1,125	
Marlin.....	3,090	Walter Francis Doughty.....	1	July —, 1909	1,800	July —, 1906
Marshall.....	7,855	W. H. Attebery.....	1	Sept. —, 1909	1,750	May —, 1896
Navasota.....	3,857	William Bennett Bizzell.....	1	(a)	2,000	June —, 1903
Orange.....	3,835	James Evans Binkley.....	1	Sept. 1, 1910	1,600	May 26, 1909
Palestine.....	8,297	Walker King.....	1	Aug. —, 1909	1,600	Sept. —, 1905
Paris.....	9,358	J. G. Wooten.....	2	Aug. 31, 1909	2,000	
San Antonio.....	53,321	Charles James Lukin.....	2	July 1, 1911	3,000	July —, 1908
Sherman.....	10,243	Jay C. Fyle.....	2	May —, 1909	1,800	June —, 1907
Taylor.....	4,211	John Francis O'Shea.....	1	do.....	1,500	June —, 1908
Temple.....	7,065	Justin Ford Kimball.....	2	July —, 1910	2,200	May —, 1900
Terrell.....	6,330	S. M. M. Marrs.....	1	June 30, 1908	1,500	
Texarkana.....	5,256	William Y. Thornbury.....	2	Sept. —, 1910	2,000	Aug. —, 1906
Tyler.....	8,069	(a).....				
Victoria.....	4,010	Andrew Bennett Cox.....	1	Sept. 1, 1910	1,500	Aug. —, 1908
Waco.....	20,686	John Compere Lattimore.....	2	June —, 1910	2,400	July —, 1899
Waxahachie.....	4,215	Walter L. Acker.....	1	June —, 1909	1,620	— —, 1898
Weatherford.....	4,786	Thomas William Stanley.....	1	May —, 1910	1,500	Oct. —, 1904
UTAH.						
Logan.....	5,451	Alma Molyneux.....	2	July —, 1910	1,560	Sept. —, 1907
Ogden.....	16,313	John M. Mills.....	2	do.....	2,500	Apr. —, 1909
Park City.....	3,759	Arthur D. Griffin.....	1	June —, 1910	1,800	Apr. —, 1908
Provo.....	6,185	William Senior Rawlings.....	2	do.....	1,500	July —, 1894
Salt Lake City.....	53,531	David H. Christensen.....	2	do.....	4,000	July —, 1901

^a No data.^b For 1906-7; no later information.^c For 1907-8.

II.—CITY SUPERINTENDENTS—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
VERMONT.						
Barre.....	8,448	Ozias D. Mathewson.....	1	July —, 1909	\$2,500	— —, 1890
Bellows Falls.....	4,337	Marshall O. Edson.....	1	do.....	1,700	July —, 1908
Bennington.....	5,656	Albert Watson Varney.....	1	July —, 1910	1,800	Feb. —, 1902
Brattleboro.....	5,297	Florence Maude Wellman a	1	June —, 1909	850	Sept. —, 1908
Burlington.....	18,640	Henry O. Wheeler.....	1	Apr. —, 1908	2,000	
Montpelier.....	6,266	Fred J. Brownscombe.....	1	July —, 1909	2,000	Sept. —, 1904
Rutland.....	11,499	David B. Locke.....	1	June —, 1909	1,800	May —, 1906
St. Albans.....	6,239	George S. Wright.....	1	Aug. 15, 1910	1,600	Aug. 1, 1909
St. Johnsbury.....	5,666	Corwin F. Palmer.....	1	Sept. —, 1909	1,700	July —, 1908
VIRGINIA.						
Alexandria.....	14,528	William H. Sweeney.....	4	July —, 1913	1,200	June 18, 1909
Bristol.....	4,579	S. R. McChesney.....	1	May —, 1909	1,250	Sept. —, 1905
Charlottesville.....	6,449	James G. Johnson.....	4	July 31, 1913	1,200	
Danville.....	16,520	Ford Henry Wheatly.....	4	July —, 1913	2,075	Apr. —, 1908
Fredericksburg.....	5,068	Arthur D. Wright.....	4	June 30, 1913	1,400	July 1, 1909
Lynchburg.....	18,991	E. C. Glass.....	(b)	(b)	(b)	
Manchester.....	9,715	David L. Pulliam.....	4	(b)	700	— —, 1889
Newport News.....	19,635	Willis A. Jenkins.....	4	July 1, 1913	1,650	June 25, 1909
Norfolk.....	46,624	Richard Augustus Doble.....	4	July —, 1909	2,800	Jan. —, 1896
Petersburg.....	21,810	R. Randolph Jones.....	4	do.....	1,800	Mar. —, 1908
Portsmouth.....	17,427	John C. Ashton.....	(b)	(b)	(b)	
Radford.....	3,344	Leonidas W. Irwin.....	4	July —, 1909	200	
Richmond.....	85,050	William F. Fox.....	4	do.....	2,685	Feb. —, 1889
Roanoke.....	21,495	Harris Hart.....	4	July 1, 1913	2,500	May —, 1893
Staunton.....	7,289	John P. Neff.....	4	June —, 1913	1,800	June 18, 1909
Suffolk.....	3,827	Lee Britt.....	4	June 30, 1909	720	
Winchester.....	5,161	Maurice M. Lynch.....	4	do.....	600	
WASHINGTON.						
Aberdeen.....	3,747	Arthur Wilson.....	1	Aug. —, 1909	1,800	
Bellingham.....	11,062	William J. Hughes.....	3	June —, 1909	2,000	July —, 1904
Everett.....	7,838	D. A. Thornburg.....	2	July —, 1909	2,500	July —, 1905
North Yakima.....	3,154	David Craig Reed.....	4	July —, 1910	2,400	Aug. —, 1906
Olympia.....	4,082	Chauncey Edwin Beach.....	2	June 30, 1911	1,800	May —, 1909
Seattle.....	80,671	Frank B. Cooper.....	3	— —, 1910	5,000	— —, 1901
Spokane.....	36,848	Bruce M. Watson.....	1	July 1, 1910	3,750	Mar. —, 1909
Tacoma.....	37,714	Albert Henry Yoder.....	3	June —, 1911	3,600	July —, 1906
Vancouver.....	4,006	Charles W. Shumway.....	1	July 31, 1910	1,800	Sept. —, 1895
Walla Walla.....	10,049	Orrin S. Jones.....	2	June —, 1910	2,400	July —, 1904
WEST VIRGINIA.						
Benwood.....	4,511	Henry Lewis Pedicord.....	1	July —, 1909	1,008	July —, 1907
Bluefield.....	4,644	George M. Ford.....	1	June 30, 1910	2,500	Do.
Charleston.....	11,099	George S. Laidley.....	1	June 8, 1908	2,700	
Clarksburg.....	4,050	Frank L. Burdette.....	1	June —, 1909	1,600	Aug. —, 1897
Fairmont.....	5,655	Joseph Rosier.....	1	June —, 1910	2,000	June —, 1900
Grafton.....	5,650	M. M. Brooks.....	1	May —, 1908	1,500	
Hinton.....	3,763	I. B. Bush.....				
Huntington.....	11,923	Wilson Matthews Foulk.....	1	June —, 1910	2,500	June —, 1905
Martinsburg.....	7,564	George W. Brindle.....	1	June —, 1909	1,200	June —, 1904
Moundsville.....	5,362	William M. Henderson.....	1	July —, 1909	1,250	Aug. —, 1903
Parkersburg.....	11,703	Meredith D. Morris.....	1	July —, 1910	2,000	July —, 1908
Wheeling.....	38,878	Hervey Black Work.....	2	July —, 1911	2,500	Oct. —, 1904
WISCONSIN.						
Antigo.....	5,145	William H. Hickok.....	1	July —, 1909	1,800	Sept. —, 1904
Appleton.....	15,085	Carrie Emma Morgan.....	1	do.....	700	July —, 1894
Ashland.....	13,074	J. T. Hooper.....	1	do.....	2,500	May —, 1899
Baraboo.....	5,751	Harlem Roy Chamberlain.....	1	July —, 1910	1,800	June —, 1908
Beaver Dam.....	5,128	John Thomas Wilson.....	1	June —, 1909	1,500	June —, 1907
Beloit.....	10,436	Franklin Elmer Converse.....	1	Aug. —, 1910	2,300	Aug. —, 1897
Berlin.....	4,489	Henry C. Stair.....	1	June —, 1909	1,450	Sept. —, 1908
Chippewa Falls.....	8,094	George W. Swartz.....	1	do.....	2,000	Aug. —, 1907
De Pere.....						
East side.....	4,038	Charles C. Bishop.....	1	June —, 1910	1,300	June —, 1908
West side.....		Thomas J. Berto.....	1	June —, 1908	1,000	Oct. —, 1906

a Supervisor of grades.

b No data.

c For 1906-7; no later information.

II.—CITY SUPERINTENDENTS—Continued.

City.	Popula- tion. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per an- num.	Date of original appoint- ment.
WISCONSIN—cont'd.						
Eau Claire.....	17,517	W. H. Schulz ^a	1	June —, 1909	\$1,800	July —, 1902
Fond du Lac.....	15,110	William Wilson.....	1	July 1, 1910	1,500	July 8, 1909
Grand Rapids.....	4,493	Charles W. Schwede.....	3	Aug. —, 1912	2,000	—, 1900
Green Bay.....	18,684	A. W. Burton.....	1	June —, 1909	2,200	Aug. —, 1901
Janesville.....	13,185	Harry C. Buell.....	1	do	1,350	May —, 1908
Kaukauna.....	5,115	Leslie Paul Bunker.....	1	do	2,275	May —, 1904
Kenosha.....	11,606	P. J. Zimmers.....	1	July —, 1910	2,500	July —, 1897
La Crosse.....	28,895	John F. Bird.....	1	June 30, 1910	2,500	July —, 1891
Madison.....	19,164	Richard W. Dudgeon.....	2	July —, 1911	1,500	Jan. 14, 1909
Manitowoc.....	11,786	Charles W. Melsnest.....	1	June 30, 1910	2,500	July —, 1903
Marinette.....	16,195	George Henry Landgraf.....	1	June —, 1909	1,800	Sept. —, 1905
Marshfield.....	5,240	Durant Carlyle Gile.....	1	July 1, 1909	1,800	June —, 1901
Menasha.....	5,589	John Callahan.....	1	July —, 1909	1,850	Jan. —, 1909
Menomonie.....	5,655	George Alan Works.....	1	do	1,600	Aug. —, 1906
Merrill.....	8,537	Gilbert J. Roberts.....	3	July —, 1910	6,000	Apr. —, 1904
Milwaukee.....	285,315	Carroll Gardner Pearse.....	1	June —, 1909	1,600	Sept. 14, 1909
Monroe.....	3,927	G. B. Haverson.....	1	do	2,000	Aug. —, 1903
Neenah.....	5,954	Edward Monroe Beeman.....	1	Jan. —, 1909	1,500	June —, 1908
Oconto.....	5,046	John F. Bergen.....	1	June 30, 1910	2,500	July —, 1906
Oshkosh.....	28,284	Matthew N. McIver.....	1	do	1,600	Sept. —, 1899
Platteville.....	3,340	Oliver E. Gray.....	1	Aug. 1, 1910	2,500	July —, 1904
Portage.....	5,459	W. G. Cough ^b	1	July 1, 1910	1,700	May —, 1908
Racine.....	29,102	Burton E. Nelson.....	1	Apr. —, 1910	2,100	Apr. —, 1899
Rhineland.....	4,998	Frederick Arthur Harrison.....	1	June 25, 1910	1,500	Aug. 25, 1909
Sheboygan.....	22,962	Henry F. Leverenz.....	1	June —, 1910	1,900	June —, 1906
South Milwaukee.....	3,392	Fred W. Hein.....	3	June 30, 1912	1,900	Do.
Stevens Point.....	9,524	John Nicholas Davis.....	1	July —, 1909	1,650	July —, 1902
Stoughton.....	3,431	George Orton Banting.....	3	July —, 1912	2,600	July —, 1905
Sturgeon Bay.....	3,372	Charles George Stangel.....	1	June —, 1909	1,650	July —, 1907
Superior.....	31,091	William E. Maddock.....	1	May —, 1909	1,500	Sept. —, 1904
Two Rivers.....	6,814	William James Hamilton.....	1	May —, 1908	1,800	June —, 1908
Washburn.....	8,437	S. A. Oscar.....	1	July 1, 1910	2,100	June —, 1908
Watertown.....	7,419	W. P. Roseman.....	1	June —, 1909	2,500	June —, 1908
Waukesha.....	12,354	G. F. Loomis.....	1	do	1,600	Sept. —, 1904
Wausau.....	12,354	Slas B. Tobey.....	1	do	1,600	Sept. —, 1899
WYOMING.						
Cheyenne.....	14,087	S. S. Stockwell.....	1	July —, 1909	2,250	July —, 1905
Laramie.....	8,207	F. W. Lee.....	(d)	(d)	(d)	(d)
Rock Springs.....	4,363	Lewis C. Tidball, jr.....	1	June 1, 1910	1,575	Feb. 8, 1909
Sheridan.....	1,559	John Jacob Early.....	1	Aug. —, 1909	1,800	Aug. —, 1908

^a For 1907-8.^b For 1906-7; no later information.^c Increases to \$2,800 in 1911-12.^d No data.

III.—UNIVERSITY AND COLLEGE PRESIDENTS.

1.—Universities and colleges for men and for both sexes, and schools of technology.

Location.	University or college.	Name of president.
ALABAMA.		
Auburn.....	Alabama Polytechnic Institute.....	Charles C. Thach, LL. D.
Eastlake.....	Howard College.....	A. P. Montague, LL. D.
Greensboro.....	Southern University.....	Rev. S. M. Hosmer, D. D.
St. Bernard.....	St. Bernard College.....	Rev. Benedict Menges, O. S. B.
Spring Hill.....	Spring Hill College.....	Rev. Francis X. Twellmeyer, S. J.
University.....	University of Alabama.....	John W. Abercromble, LL. D.
ARIZONA.		
Tucson.....	University of Arizona.....	Kendrick C. Babcock, Ph. D.
ARKANSAS.		
Arkadelphia.....	Henderson College.....	John H. Hinemon, A. M.
Do.....	Ouachita College.....	Henry S. Hartzog.
Batesville.....	Arkansas College.....	Eugene R. Long, Ph. D.
Clarksville.....	Arkansas Cumberland College.....	Rev. G. D. Crawford.
Conway.....	Hendrix College.....	Rev. S. Anderson, D. D.
Fayetteville.....	University of Arkansas.....	John N. Tillman, LL. D.
Little Rock.....	Philander Smith College.....	Rev. J. M. Cox, D. D.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

1.—Universities and colleges for men and for both sexes, and schools of technology—Con.

Location.	University or college.	Name of president.
CALIFORNIA.		
Berkeley.....	University of California.....	Benj. Ide Wheeler, LL. D.
Claremont.....	Pomona College.....	Wm. Horace Day.
Los Angeles.....	Occidental College.....	John W. Baer, LL. D.
Do.....	St. Vincent's College.....	Rev. J. S. Glass, C. M., D. D.
Do.....	University of Southern California.....	Rev. George F. Bovard, D. D.
Oakland.....	California College.....	Rev. Charles W. Brinstad, B. D., chancellor.
Do.....	St. Mary's College.....	Rev. Brother Vellesian, F. S. C.
Pasadena.....	Throop Polytechnic Institute.....	James A. B. Scherer, LL. D.
San Francisco.....	St. Ignatius College.....	Rev. Joseph C. Sasla, S. J.
San Jose.....	University of the Pacific.....	Wm. W. Guth, Ph. D.
Santa Clara.....	Santa Clara College.....	Rev. Richard A. Gleeson, S. J.
Stanford University.....	Leland Stanford Junior University.....	David Starr Jordan, LL. D.
COLORADO.		
Boulder.....	University of Colorado.....	James H. Baker, LL. D.
Colorado Springs.....	Colorado College.....	Rev. W. F. Slocum, LL. D.
Denver.....	College of the Sacred Heart.....	Rev. J. J. Brown, S. J.
Fort Collins.....	Colorado Agricultural College.....	Chas. A. Lory, M. S.
Golden.....	State School of Mines.....	Victor C. Alderson, Sc. D.
University Park.....	University of Denver.....	Rev. Henry A. Buchtel, LL. D., chancellor.
Westminster.....	Westminster University.....	Salem G. Pattison, M. A.
CONNECTICUT.		
Hartford.....	Trinity College.....	Flavel S. Luther, LL. D.
Middletown.....	Wesleyan University.....	Rev. W. A. Shanklin, LL. D.
New Haven.....	Yale University.....	Arthur T. Hadley, LL. D.
Storrs.....	Connecticut Agricultural College.....	C. H. Beach, B. S.
DELAWARE.		
Dover.....	State College for Colored Students.....	Rev. W. C. Jason, A. M.
Newark.....	Delaware College.....	Geo. A. Harter, Ph. D.
DISTRICT OF COLUMBIA.		
Washington.....	Catholic University of America.....	Rev. Thomas J. Shahan, S. T. D., rector.
Do.....	Gallaudet College.....	E. M. Gallaudet, LL. D.
Do.....	Georgetown University.....	Rev. Joseph Himmel, S. J.
Do.....	George Washington University.....	Charles W. Needham, LL. D.
Do.....	Howard University.....	Rev. Wilbur P. Thirkield, LL. D.
Do.....	St. John's College.....	Rev. Brother Doretheus, F. S. C.
Do.....	Washington Christian College.....	Daniel E. Motley, Ph. D.
FLORIDA.		
Deland.....	John B. Stetson University.....	Lincoln Hulley, Ph. D.
Gainesville.....	University of Florida.....	A. A. Murphree, LL. D.
Winter Park.....	Rollins College.....	Rev. Wm. F. Blackman, Ph. D.
GEORGIA.		
Athens.....	University of Georgia.....	David C. Barrow, LL. D., chan- cellor.
Atlanta.....	Atlanta Baptist College.....	John Hope, A. M.
Do.....	Atlanta University.....	Edward T. Ware, A. B.
Do.....	Morris Brown College.....	Rev. E. W. Lee, D. D.
Do.....	Georgia School of Technology.....	Kenneth G. Matheson, LL. D.
Bowdon.....	Bowdon College.....	V. D. Whatley.
Dahlonega.....	North Georgia Agricultural College.....	G. R. Glenn, LL. D.
Demorest.....	Piedmont College.....	Rev. Henry C. Newell, B. S.
Macon.....	Mercer University.....	Samuel Y. Jameson.
Oxford.....	Emory College.....	Rev. J. E. Dickey, D. D.
South Atlanta.....	Clark University.....	W. H. Crogman, Litt. D.
Wrightsville.....	Warthen College.....	W. E. Lumley.
Young Harris.....	Young Harris College.....	Rev. Joseph A. Sharp, A. B.
IDAHO.		
Caldwell.....	College of Idaho.....	Rev. William J. Boone, D. D.
Moscow.....	University of Idaho.....	James A. MacLean, Ph. D.
ILLINOIS.		
Abingdon.....	Hedding College.....	Rev. Wm. Pitt MacVey, D. D.
Bloomington.....	Illinois Wesleyan University.....	Rev. Theodore Kemp, D. D.
Bourbonnais.....	St. Viator's College.....	Rev. John P. O'Mahoney, C. S. V.
Carlinville.....	Blackburn College.....	Walter H. Bradley, acting.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

1.—Universities and colleges for men and for both sexes, and schools of technology—Con.

Location.	University or college.	Name of president.
ILLINOIS—continued.		
Carthage.....	Carthage College.....	Rev. H. D. Hoover, Ph. D.
Chicago.....	Armour Institute of Technology.....	Rev. Frank W. Gunsaulus, LL. D.
Do.....	Lewis Institute.....	George N. Carman, A. M., director.
Do.....	St. Ignatius College.....	Rev. Alexander J. Burrowes, S. J.
Do.....	St. Stanislaus College.....	Rev. John J. Kosinski, C. R.
Do.....	University of Chicago.....	Harry Pratt Judson, LL. D.
Decatur.....	James Millikin University.....	A. R. Taylor, LL. D.
Eureka.....	Eureka College.....	Robert E. Hieronymus, A. M.
Evanston.....	Northwestern University.....	Abram W. Harris, LL. D.
Ewing.....	Ewing College.....	Rev. J. A. Leavitt, D. D.
Galesburg.....	Knox College.....	Rev. Thomas McClelland, D. D.
Do.....	Lombard College.....	Rev. Lewis B. Fisher, D. D.
Greenville.....	Greenville College.....	Eldon Grant Burritt, A. M.
Jacksonville.....	Illinois College.....	Charles H. Rammelkamp, Ph. D.
Lake Forest.....	Lake Forest College.....	John S. Nollen, Ph. D.
Lebanon.....	McKendree College.....	Rev. John F. Harmon, D. D.
Lincoln.....	Lincoln College.....	J. H. McMurray, A. M.
Monmouth.....	Monmouth College.....	Rev. Thos. H. McMichael, D. D.
Naperville.....	Northwestern College.....	Rev. H. J. Kieckhefer, Ph. D.
Quincy.....	St. Francis Solanus College.....	Rev. Anselm Mueller, O. S. F.
Rock Island.....	Augustana College.....	Gustav A. Andreen, Ph. D.
Upper Alton.....	Shurtleff College.....	John D. S. Riggs, L. H. D.
Urbana.....	University of Illinois.....	Edmund J. James, LL. D.
Westfield.....	Westfield College.....	Rev. Benj. F. Daugherty, D. D.
Wheaton.....	Wheaton College.....	Rev. C. A. Blanchard, D. D.
INDIANA.		
Bloomington.....	Indiana University.....	William L. Bryan, LL. D.
Collegeville.....	St. Joseph's College.....	Rev. Augustine Seifert, C. PP. S.
Crawfordsville.....	Wabash College.....	Rev. Geo. Lewes Mackintosh, D. D.
Earlham.....	Earlham College.....	Robert L. Kelly, LL. D.
Fort Wayne.....	Concordia College.....	Rev. Martin Luecke.
Franklin.....	Franklin College.....	Melvin E. Crowell, A. M.
Greencastle.....	De Pauw University.....	Rev. Francis J. McConnell.
Hanover.....	Hanover College.....	William A. Millis, LL. D.
Irvington.....	Butler College.....	Thomas C. Howe, Ph. D.
Lafayette.....	Purdue University.....	W. E. Stone, LL. D.
Merom.....	Union Christian College.....	Rev. O. B. Whitaker, D. D.
Moores Hill.....	Moores Hill College.....	Harry A. King.
Notre Dame.....	University of Notre Dame.....	Rev. John Cavanaugh, C.S.C., D.D.
Oakland City.....	Oakland City College.....	Wm. P. Dearing.
St. Meinrad.....	St. Meinrad College.....	Rev. A. Schmitt, O. S. B.
Terre Haute.....	Rose Polytechnic Institute.....	Carl L. Mees, Ph. D.
Upland.....	Taylor University.....	Rev. Monroe Vayhinger, A. M.
Valparaiso.....	Valparaiso University.....	H. B. Brown.
Vincennes.....	Vincennes University.....	Horace Ellis.
IOWA.		
Ames.....	Iowa State College of Agriculture and Me- chanic Arts.....	Albert B. Storms, LL. D.
Cedar Rapids.....	Coe College.....	Rev. J. A. Marquis, D. D.
Charles City.....	Charles City College.....	Rev. Frank E. Hirsch, D. D.
Clinton.....	Wartburg College.....	John Fritschel.
College Springs.....	Amity College.....	Rev. R. T. Campbell, D. D.
Decorah.....	Luther College.....	Rev. C. K. Preus.
Des Moines.....	Des Moines College.....	Loran D. Osborn, Ph. D.
Do.....	Drake University.....	Hill M. Bell, LL. D.
Dubuque.....	St. Joseph's College.....	Very Rev. Daniel M. Gorman.
Fairfield.....	Parsons College.....	Rev. W. E. Parsons, D. D.
Fayette.....	Upper Iowa University.....	J. H. T. Main, Ph. D.
Grinnell.....	Grinnell College.....	Rev. E. E. Reed, D. D.
Hopkinton.....	Lenox College.....	Charles E. Shelton, LL. D.
Indianola.....	Simpson College.....	Geo. E. MacLean, LL. D.
Iowa City.....	State University of Iowa.....	David Allen Anderson.
Lamoni.....	Graceland College.....	Ercy C. Kerr, A. M.
Legrand.....	Palmer College.....	Rev. Edwin A. Schell.
Mount Pleasant.....	Iowa Wesleyan University.....	James E. Harlan, LL. D.
Mount Vernon.....	Cornell College.....	Rev. Edwin D. Kizer, Ph. D.
Oskaloosa.....	Oskaloosa College.....	A. Rosenberger, A. B.
Do.....	Penn College.....	Rev. L. A. Garrison, D. D.
Pella.....	Central University of Iowa.....	Luther Freeman.
Sioux City.....	Morningside College.....	Rev. Geo. H. Fracker, D. D., act- ing.
Storm Lake.....	Buena Vista College.....	Frederick W. Long, A. M.
Tabor.....	Tabor College.....	Rev. Franklin E. Brooke, D. D.
Toledo.....	Leander Clark College.....	

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

1.—Universities and colleges for men and for both sexes, and schools of technology—Con.

Location.	University or college.	Name of president.
KANSAS.		
Atchison.....	Midland College.....	Rev. Millard F. Troxell, D. D.
Do.....	St. Benedict's College.....	Rt. Rev. I. Wolf, O. S. B., D. D.
Baldwin.....	Baker University.....	Rev. L. H. Murlin, D. D.
Emporia.....	College of Emporia.....	Henry Coe Culbertson, A. B.
Highland.....	Highland University.....	Wm. C. J. Adams, Ph. D.
Holton.....	Campbell College.....	T. D. Crites.
Kansas City.....	Kansas City University.....	Rev. D. S. Stephens, D. D., chan- cellor.
Lawrence.....	University of Kansas.....	Frank Strong, Ph. D.
Lincoln.....	Kansas Christian College.....	
Lindsborg.....	Bethany College.....	Rev. Ernst F. Pihlblad, A. M.
McPherson.....	McPherson College.....	Edward Frantz.
Manhattan.....	Kansas State Agricultural College.....	Henry J. Waters, B. S. A.
Ottawa.....	Ottawa University.....	S. E. Price.
St. Marys.....	St. Mary's College.....	Rev. Aloysius A. Breen, S. J.
Salina.....	Kansas Wesleyan University.....	R. P. Smith.
Sterling.....	Cooper College.....	Rev. F. M. Spencer, D. D.
Topeka.....	Washburn College.....	Rev. Frank K. Sanders, D. D.
Wichita.....	Fairmount College.....	Rev. Henry E. Thayer, D. D.
Do.....	Friends University.....	Edmund Stanley, A. M.
Winfield.....	St. John's Lutheran College.....	Rev. A. W. Meyer.
Do.....	Southwest Kansas College.....	Rev. F. E. Mossman, D. D.
KENTUCKY.		
Berea.....	Berea College.....	Rev. Wm. G. Frost, Ph. D.
Danville.....	Central University of Kentucky.....	Frederick W. Hinitz, Ph. D.
Georgetown.....	Georgetown College.....	Rev. J. J. Taylor, LL. D.
Hopkinsville.....	McLean College.....	A. C. Kuykendall, A. B.
Lexington.....	State University.....	J. K. Patterson, LL. D.
Do.....	Transylvania University.....	Richard H. Crossfield, Ph. D.
Louisville.....	University of Louisville.....	John Patterson, LL. D.
Lyndon.....	Kentucky Military Institute.....	C. W. Fowler, C. E.
Russellville.....	Bethel College.....	Floran D. Perkins.
St. Mary.....	St. Mary's College.....	Rev. Michael Jaglowicz, C. R.
Winchester.....	Kentucky Wesleyan College.....	John J. Tigert, A. M.
LOUISIANA.		
Baton Rouge.....	Louisiana State University.....	Thomas D. Boyd, LL. D.
Convent.....	Jefferson College.....	Rev. R. H. Smith, S. M.
New Orleans.....	College of the Immaculate Conception.....	Rev. E. Mattern, S. J.
Do.....	Leland University.....	R. W. Perkins, Ph. D.
Do.....	New Orleans University.....	Frederic H. Knight, Ph. D.
Do.....	Tulane University of Louisiana.....	E. B. Craighead, LL. D.
Shreveport.....	Centenary College of Louisiana.....	Wm. L. Weber, LL. D.
MAINE.		
Brunswick.....	Bowdoin College.....	Rev. Wm. De Witt Hyde, LL. D.
Lewiston.....	Bates College.....	Rev. G. C. Chase, LL. D.
Orono.....	University of Maine.....	George E. Fellows, LL. D.
Waterville.....	Colby College.....	Arthur J. Roberts, A. M.
MARYLAND.		
Annapolis.....	St. John's College.....	Thomas Fell, LL. D.
Do.....	United States Naval Academy.....	Capt. C. J. Badger, U. S. N., super- intendent.
Baltimore.....	Johns Hopkins University.....	Ira Remsen, LL. D.
Do.....	Loyola College.....	Rev. Francis X. Brady, S. J.
Do.....	Morgan College.....	Rev. John O. Spencer, Ph. D.
Chestertown.....	Washington College.....	James W. Cain, LL. D.
College Park.....	Maryland Agricultural College.....	R. W. Silvester, LL. D.
Ellicott City.....	Rock Hill College.....	Rev. Brother Maurice, F. S. C.
Do.....	St. Charles College.....	Rev. F. X. McKenny, S. S.
Emmitsburg.....	Mount St. Mary's College.....	Very Rev. D. J. Flynn, LL. D.
New Windsor.....	New Windsor College.....	Rev. James Fraser, LL. D.
Westminster.....	Western Maryland College.....	Rev. Thomas H. Lewis, LL. D.
MASSACHUSETTS.		
Amherst.....	Amherst College.....	Rev. George Harris, LL. D.
Do.....	Massachusetts Agricultural College.....	K. L. Butterfield, A. M.
Boston.....	Boston College.....	Rev. William Gannon, S. J.
Do.....	Boston University.....	Rev. W. E. Huntington, LL. D.
Do.....	Massachusetts Institute of Technology.....	Richard C. Maclaurin, LL. D.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

1.—Universities and colleges for men and for both sexes, and schools of technology—Con.

Location.	University or college.	Name of president.
MASSACHUSETTS—CON.		
Cambridge.....	Harvard University.....	Abbott Lawrence Lowell, LL. D.
Springfield.....	American International College.....	Rev. R. De Witt Mallary, D. D.
Tufts College.....	Tufts College.....	Frederick W. Hamilton, LL. D.
Williamstown.....	Williams College.....	Harry A. Garfield, LL. D.
Worcester.....	Clark University.....	G. Stanley Hall, LL. D.
Do.....	Collegiate Department of Clark University.....	Edmund Clark Sanford, Ph. D.
Do.....	College of the Holy Cross.....	Rev. Thomas E. Murphy, S. J.
Do.....	Worcester Polytechnic Institute.....	Edmund A. Engler, LL. D.
MICHIGAN.		
Adrian.....	Adrian College.....	Rev. B. W. Anthony, LL. D.
Albion.....	Albion College.....	Samuel Dickie, LL. D.
Alma.....	Alma College.....	Rev. August F. Bruske, D. D.
Ann Arbor.....	University of Michigan.....	Harry B. Hutchins, LL. D., acting.
Detroit.....	Detroit College.....	Rev. Richard D. Slevin, S. J.
East Lansing.....	Michigan Agricultural College.....	J. L. Snyder, Ph. D.
Hillsdale.....	Hillsdale College.....	Joseph W. Mauck, LL. D.
Holland.....	Hope College.....	Gerrit J. Kollen, LL. D.
Houghton.....	Michigan College of Mines.....	F. W. McNair, D. Sc.
Kalamazoo.....	Kalamazoo College.....	A. G. Slocum, LL. D.
Olivet.....	Olivet College.....	E. G. Lancaster, Ph. D.
MINNESOTA.		
Collegeville.....	St. John's University.....	Rev. P. Engel, O. S. B., Ph. D.
Minneapolis.....	Augsburg Seminary.....	Sven Oftedal.
Do.....	University of Minnesota.....	Cyrus Northrop, LL. D.
Northfield.....	Carleton College.....	Donald J. Cowling.
Do.....	St. Olaf College.....	Rev. John N. Kildahl.
St. Paul.....	Hamline University.....	Rev. Geo. H. Bridgman, LL. D.
Do.....	Macalester College.....	Thomas M. Hodgman, LL. D.
St. Peter.....	Gustavus Adolphus College.....	Rev. P. A. Mattson, D. D.
Winnebago.....	Parker College.....	Rev. E. W. Van Aken, B. D.
MISSISSIPPI.		
Agricultural College.....	Mississippi Agricultural and Mechanical College.....	J. C. Hardy, LL. D.
Alcorn.....	Alcorn Agricultural and Mechanical College.....	Levi J. Rowan, B. S.
Clinton.....	Mississippi College.....	Rev. Wm. T. Lowrey, D. D.
Holly Springs.....	Rust University.....	Rev. James T. Docking.
Jackson.....	Millsaps College.....	Rev. W. B. Murrah, LL. D.
Meridian.....	Meridian Male College.....	Malcomb A. Beeson, B. S.
University.....	University of Mississippi.....	A. A. Kincannon, LL. D., chancellor.
MISSOURI.		
Bowling Green.....	Pike College.....	Lula M. Collmis.
Cameron.....	Missouri Wesleyan College.....	H. R. De Bra.
Canton.....	Christian University.....	Carl Johann, LL. D.
Clarksburg.....	Clarksburg College.....	F. C. Richards.
Columbia.....	University of Missouri.....	Albert Ross Hill, LL. D.
Conception.....	Conception College.....	Rt. Rev. Frowin Conrad, O. S. B.
Farmington.....	Carleton College.....	George B. Thomas, A. M.
Fayette.....	Central College.....	William A. Webb, A. B.
Fulton.....	Westminster College.....	Rev. D. R. Kerr, Ph. D.
Glasgow.....	Pritchett College.....	Uriel S. Hall, A. B.
Lagrange.....	Lagrange College.....	Jere T. Muir, LL. D.
Liberty.....	William Jewell College.....	Rev. J. P. Greene, LL. D.
Marshall.....	Missouri Valley College.....	Rev. Wm. H. Black, LL. D.
Morrisville.....	Morrisville College.....	Louis C. Perry.
Odesa.....	Western Bible and Literary College.....	R. N. Gardner, B. S.
Parkville.....	Park College.....	L. M. McAfee, LL. D.
St. Louis.....	Christian Brothers College.....	Rev. Brother Justin, LL. D.
Do.....	St. Louis University.....	Rev. John P. Frieden, S. J.
Do.....	Washington University.....	David F. Houston, LL. D., chancellor.
Springfield.....	Drury College.....	Rev. Joseph H. George, D. D.
Tarkio.....	Tarkio College.....	Rev. J. A. Thompson, D. D.
Warrenton.....	Central Wesleyan College.....	Rev. Geo. B. Addicks, D. D.
MONTANA.		
Bozeman.....	Montana College of Agriculture and Mechanic Arts.....	James M. Hamilton, M. S.
Butte.....	Montana State School of Mines.....	Charles H. Bowman.
Missoula.....	University of Montana.....	C. A. Duniway, Ph. D.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

1.—Universities and colleges for men and for both sexes, and schools of technology—Con.

Location.	University or college.	Name of president.
NEBRASKA.		
Bellevue.....	Bellevue College.....	Stephen W. Stookey, LL. D.
Bethany.....	Cotner University.....	W. P. Aylsworth, LL. D.
College View.....	Union College.....	C. C. Lewis, B. S.
Crete.....	Doane College.....	Rev. David B. Perry, D. D.
Grand Island.....	Grand Island College.....	Rev. Geo. Sutherland, D. D.
Hastings.....	Hastings College.....	Archelaus E. Turner, LL. D.
Lincoln.....	University of Nebraska.....	Samuel Avery, Ph. D., chancellor.
Omaha.....	Creighton University.....	Rev. M. P. Dowling, S. J.
University Place.....	Nebraska Wesleyan University.....	Wm. J. Davidson, B. S.
York.....	York College.....	Rev. Wm. E. Schell, D. D.
NEVADA.		
Reno.....	State University of Nevada.....	Rev. J. E. Stubbs, LL. D.
NEW HAMPSHIRE.		
Durham.....	New Hampshire College of Agriculture and Mechanic Arts.....	W. D. Gibbs, Sc. D.
Hanover.....	Dartmouth College.....	E. F. Nichols, LL. D.
Manchester.....	St. Anselm's College.....	Rev. Hilary Pfraeangle, D. D.
NEW JERSEY.		
Hoboken.....	Stevens Institute of Technology.....	Alexander C. Humphreys, Sc. D.
Jersey City.....	St. Peter's College.....	Rev. Edward J. Magrath, S. J.
Kenilworth.....	Upsala College.....	Rev. L. H. Beck, Ph. D.
New Brunswick.....	Rutgers College.....	Rev. Wm. H. S. Demarest, D. D.
Princeton.....	Princeton University.....	Woodrow Wilson, LL. D.
South Orange.....	Seton Hall College.....	Very Rev. James F. Mooney.
NEW MEXICO.		
Agricultural College.....	New Mexico College of Agriculture and Me- chanic Arts.....	W. E. Garrison, Ph. D.
Albuquerque.....	University of New Mexico.....	Edward McQueen Gray.
Socorro.....	New Mexico School of Mines.....	E. A. Drake.
NEW YORK.		
Alfred.....	Alfred University.....	Rev. B. C. Davis, D. D.
Anandale.....	St. Stephen's College.....	Rev. Wm. C. Rodgers, D. D.
Brooklyn.....	Adelphi College.....	C. H. Levermore, Ph. D.
Do.....	Polytechnic Institute of Brooklyn.....	F. W. Atkinson, Ph. D.
Do.....	St. Francis College.....	Brother Vincent, O. S. F.
Do.....	St. John's College.....	Very Rev. John W. Moore, C. M.
Buffalo.....	Canisius College.....	Rev. Augustine A. Miller, S. J.
Canton.....	St. Lawrence University.....	Rev. Almon Gunnison, LL. D.
Clinton.....	Hamilton College.....	Rev. M. W. Stryker, LL. D.
Geneva.....	Hobart College.....	Rev. L. C. Stewardson, LL. D.
Hamilton.....	Colgate University.....	Elmer B. Bryan, LL. D.
Ithaca.....	Cornell University.....	J. G. Schurman, LL. D.
New York.....	College of St. Francis Xavier.....	Rev. Thomas J. McCluskey, S. J.
Do.....	College of the City of New York.....	John H. Finley, LL. D.
Do.....	Columbia University.....	Nicholas M. Butler, LL. D.
Do.....	Manhattan College.....	Rev. Brother Jerome, F. S. C.
Do.....	Fordham University.....	Rev. David J. Quinn, S. J.
Do.....	New York University.....	Rev. H. M. MacCracken, LL. D., chancellor.
Niagara University.....	Niagara University.....	Very Rev. Edward J. Walsh, C. M.
Potsdam.....	Clarkson School of Technology.....	W. S. Aldrich, M. E., director.
Rochester.....	University of Rochester.....	Rev. Rush Rhees, LL. D.
St. Bonaventure.....	St. Bonaventure's College.....	Very Rev. Joseph F. Butler, O. F. M.
Schenectady.....	Union College.....	Rev. Charles A. Richmond, D. D.
Syracuse.....	Syracuse University.....	Rev. J. R. Day, LL. D., chancellor.
Troy.....	Rensselaer Polytechnic Institute.....	Palmer C. Ricketts, C. E.
West Point.....	United States Military Academy.....	Col. Hugh L. Scott, U. S. A., supt.
NORTH CAROLINA.		
Belmont.....	St. Mary's College.....	Rev. Leo Haid, D. D., O. S. B.
Chapelhill.....	University of North Carolina.....	F. P. Venable, LL. D.
Charlotte.....	Biddle University.....	H. L. McCrorey.
Davidson.....	Davidson College.....	Henry L. Smith, Ph. D.
Durham.....	Trinity College.....	Rev. John C. Kilgo, D. D.
Elon College.....	Elon College.....	E. L. Moffitt, LL. D.
Greensboro.....	Agricultural and Mechanical College for the Colored Race.....	J. B. Dudley.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

1.—Universities and colleges for men and for both sexes, and schools of technology—Con.

Location.	University or college.	Name of president.
NORTH CAROLINA—CON.		
Guilford College.....	Guilford College.....	L. Lyndon Hobbs, A. M.
Hickory.....	Lenoir College.....	Rev. R. L. Fritz, A. M.
Newton.....	Catawba College.....	W. R. Weaver, A. M., dean.
Raleigh.....	Shaw University.....	Chas. F. Meserve, LL. D.
Salisbury.....	Livingstone College.....	Rev. William H. Goler, LL. D.
Wake Forest.....	Wake Forest College.....	Wm. L. Poteat, LL. D.
Weaverville.....	Weaverville College.....	Rev. L. B. Abernethy.
West Raleigh.....	North Carolina College of Agriculture and Mechanic Arts.	Daniel H. Hill, Litt. D.
NORTH DAKOTA.		
Agricultural College.....	North Dakota Agricultural College.....	J. H. Worst, LL. D.
Fargo.....	Fargo College.....	
Grand Forks.....	Wesley College.....	Rev. Edward P. Robertson, D. D.
University.....	University of North Dakota.....	Frank L. McVey, Ph. D.
OHIO.		
Ada.....	Ohio Northern University.....	Rev. Albert E. Smith, D. D.
Akron.....	Buchtel College.....	Rev. A. B. Church, LL. D.
Alliance.....	Mount Union College.....	Rev. W. H. McMaster, A. M.
Ashland.....	Ashland College.....	J. L. Gillin, Ph. D.
Athens.....	Ohio University.....	Alston Ellis, LL. D.
Berea.....	Baldwin University.....	Rev. Robert L. Waggoner, D. D.
Do.....	German Wallace College.....	Rev. E. S. Havighorst, D. D.
Cedarville.....	Cedarville College.....	Rev. David McKinney, LL. D.
Cincinnati.....	St. Xavier College.....	Rev. Joseph Grimmelsman.
Do.....	University of Cincinnati.....	Chas. W. Dabney, LL. D.
Cleveland.....	Case School of Applied Science.....	Charles S. Howe, Ph. D.
Do.....	St. Ignatius College.....	Rev. Geo. J. Pickel, S. J.
Do.....	Western Reserve University.....	Rev. C. F. Thwing, LL. D.
Columbus.....	Capital University.....	Rev. L. H. Schuh, Ph. D.
Do.....	Ohio State University.....	Rev. W. O. Thompson, LL. D.
Dayton.....	St. Mary's Institute.....	Rev. Bernard P. O'Reilly, S. M.
Defiance.....	Defiance College.....	P. W. McReynolds, A. M.
Delaware.....	Ohio Wesleyan University.....	Rev. Herbert Welch, LL. D.
Findlay.....	Findlay College.....	Rev. C. I. Brown, D. D.
Gambier.....	Kenyon College.....	Rev. Wm. F. Peirce, L. H. D.
Granville.....	Denison University.....	Rev. Emory W. Hunt, LL. D.
Hiram.....	Hiram College.....	Miner Lee Bates, A. M.
Marietta.....	Marietta College.....	Rev. Alfred T. Perry, D. D.
New Athens.....	Franklin College.....	A. M. Campbell.
New Concord.....	Muskingum College.....	Rev. J. K. Montgomery, D. D.
Oberlin.....	Oberlin College.....	Rev. Henry C. King, D. D.
Oxford.....	Miami University.....	Rev. Guy P. Benton, LL. D.
Richmond.....	Richmond College.....	Rev. G. W. MacMillan, Ph. D.
Rio Grande.....	Rio Grande College.....	Rev. J. M. Davis, Ph. D.
Scio.....	Scio College.....	Rev. R. Emory Beetham, D. D.
Springfield.....	Wittenberg College.....	Rev. Charles G. Heckert, D. D.
Tiffin.....	Heidelberg University.....	Rev. Charles E. Miller, D. D.
Toledo.....	St. John's University.....	Rev. Francis Heiermann, S. J.
Westerville.....	Otterbein University.....	Lewis Bookwalter.
West Lafayette.....	West Lafayette College.....	James H. Straughn.
Wilberforce.....	Wilberforce University.....	Wm. S. Scarborough, LL. D.
Wilmington.....	Wilmington College.....	Rev. Albert J. Brown, D. D.
Wooster.....	University of Wooster.....	Rev. Louis E. Holden, LL. D.
Yellowsprings.....	Antioch College.....	S. D. Fess, LL. D.
OKLAHOMA.		
Bacone.....	Bacone College.....	E. N. Collette.
Kingfisher.....	Kingfisher College.....	
Norman.....	University of Oklahoma.....	Rev. Arthur G. Evans.
Oklahoma City.....	Epworth University.....	Rev. Geo. H. Bradford, D. D., chancellor.
Stillwater.....	Oklahoma Agricultural and Mechanical College.	J. H. Connell, M. S.
Tulsa.....	Henry Kendall College.....	L. H. Beeler.
OREGON.		
Albany.....	Albany College.....	H. M. Crooks, A. B.
Corvallis.....	Oregon Agricultural College.....	W. J. Kerr.
Dallas.....	Dallas College.....	Rev. Charles A. Mock, Ph. D.
Eugene.....	University of Oregon.....	Prince L. Campbell, A. B.
Forest Grove.....	Pacific University.....	Wm. N. Ferrin, LL. D.
McMinnville.....	McMinnville College.....	Leonard W. Riley, D. D.
Newberg.....	Pacific College.....	Wm. Irving Kelsey.
Philomath.....	Philomath College.....	O. V. White, M. S., dean.
Salem.....	Willamette University.....	Rev. Fletcher Homan, D. D.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

1.—Universities and colleges for men and for both sexes, and schools of technology—Con.

Location.	University or college.	Name of president.
PENNSYLVANIA.		
Allentown.....	Muhlenberg College.....	Rev. J. W. A. Haas, D. D.
Annnville.....	Lebanon Valley College.....	Rev. Lawrence Keister, S. T. B.
Beatty.....	St. Vincent College.....	Rev. Leander Schnerr, O. S. B.
Beaver Falls.....	Geneva College.....	Rev. William H. George, A. M.
Bethlehem.....	Moravian College.....	Rev. Aug. Schultze, L. H. D.
Carlisle.....	Dickinson College.....	Rev. G. E. Reed, LL. D.
Chester.....	Pennsylvania Military College.....	Col. C. E. Hyatt, C. E.
Collegeville.....	Ursinus College.....	Rev. A. Edwin Keigwin, D. D.
Easton.....	Lafayette College.....	Rev. E. D. Warfield, LL. D.
Gettysburg.....	Pennsylvania College.....	Rev. Samuel G. Hefelbower, D. D.
Greenville.....	Thiel College.....	O. F. H. Bert, A. M., dean.
Grove City.....	Grove City College.....	Rev. I. C. Ketter, LL. D.
Haverford.....	Haverford College.....	Isaac Sharpless, LL. D.
Huntingdon.....	Juniata College.....	Martin G. Brumbaugh, LL. D.
Lancaster.....	Franklin and Marshall College.....	Rev. Henry H. Appel, D. D.
Lewisburg.....	Bucknell University.....	John H. Harris, LL. D.
Lincoln University.....	Lincoln University.....	Rev. John B. Rendall, D. D.
Meadville.....	Allegheny College.....	Rev. Wm. H. Crawford, LL. D.
Myerstown.....	Albright College.....	John Francis Dunlap.
New Wilmington.....	Westminster College.....	Rev. Robert M. Russell, LL. D.
Philadelphia.....	Central High School.....	Rev. R. E. Thompson, S. T. D.
Do.....	La Salle College.....	Brother Wolfred.
Do.....	Temple University.....	Russell H. Conwell, LL. D.
Do.....	University of Pennsylvania.....	C. C. Harrison, LL. D., provost.
Pittsburg.....	Pittsburg College of the Holy Ghost.....	Rev. M. A. Hehr, LL. D.
Do.....	University of Pittsburg.....	Rev. S. B. McCormick, LL. D., chancellor.
Selinsgrove.....	Susquehanna University.....	Rev. Charles T. Aikens, D. D.
South Bethlehem.....	Lehigh University.....	Henry S. Drinker, LL. D.
State College.....	Pennsylvania State College.....	Edwin E. Sparks, LL. D.
Swarthmore.....	Swarthmore College.....	Joseph Swain, LL. D.
Villanova.....	Villanova College.....	Rev. L. A. Delurey, O. S. A.
Volant.....	Volant College.....	C. F. Ball, A. M.
Washington.....	Washington and Jefferson College.....	Rev. J. D. Moffat, LL. D.
Waynesburg.....	Waynesburg College.....	Wm. M. Hudson.
RHODE ISLAND.		
Kingston.....	Rhode Island State College.....	Howard Edwards, LL. D.
Providence.....	Brown University.....	Rev. W. H. P. Faunce, LL. D.
SOUTH CAROLINA.		
Charleston.....	College of Charleston.....	Harrison Randolph, LL. D.
Do.....	South Carolina Military Academy.....	Col. O. J. Bond, A. M., supt.
Clemson College.....	Clemson Agricultural College.....	P. H. Mell, Ph. D.
Clinton.....	Presbyterian College of South Carolina.....	Rev. Robert Adams, D. D.
Columbia.....	Allen University.....	Rev. Wm. D. Chappelle, D. D.
Do.....	Benedict College.....	Rev. A. C. Osborn, LL. D.
Do.....	University of South Carolina.....	S. C. Mitchell, Ph. D.
Due West.....	Erskine College.....	James Strong Moffatt, D. D.
Greenville.....	Furman University.....	Rev. Edwin McNeil Poteat, D. D.
Newberry.....	Newberry College.....	Rev. John H. Harms.
Orangeburg.....	Claffin University.....	Rev. L. M. Dunton, D. D.
Spartanburg.....	Wofford College.....	Henry N. Snyder, A. M.
SOUTH DAKOTA.		
Brookings.....	South Dakota Agricultural College.....	Robert L. Slagle, Ph. D.
Huron.....	Huron College.....	Rev. C. H. French, D. D.
Mitchell.....	Dakota Wesleyan University.....	Rev. Samuel F. Kerfoot, D. D.
Rapid City.....	State School of Mines.....	Charles H. Fulton.
Redfield.....	Redfield College.....	Noah C. Hirschy, Ph. D.
Vermilion.....	University of South Dakota.....	Franklin B. Gault.
Yankton.....	Yankton College.....	Rev. H. K. Warren, LL. D.
TENNESSEE.		
Bristol.....	King College.....	B. R. Smith.
Chattanooga.....	Chattanooga University.....	Rev. J. H. Race, D. D.
Clarks ville.....	Southwestern Presbyterian University.....	Wm. Dinwiddie, chancellor.
Cumberland Gap.....	Lincoln Memorial University.....	Wm. L. Stooksbury, Ph. D.
Greeneville.....	Washington and Tusculum College.....	Rev. Chas. O. Gray, D. D.
Jackson.....	Southwestern Baptist University.....	Rev. P. T. Hale, LL. D.
Jefferson City.....	Carson and Newman College.....	Rev. M. D. Jeffries, D. D.
Knoxville.....	Knoxville College.....	Rev. R. W. McGranahan, D. D.
Do.....	University of Tennessee.....	Brown Ayres, LL. D.
Lebanon.....	Cumberland University.....	Nathan Green, acting.
McKenzie.....	Bethel College.....	N. J. Finney, A. M.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

I.—Universities and colleges for men and for both sexes, and schools of technology—Con.

Location.	University or college.	Name of president.
TENNESSEE—cont'd.		
Maryville.....	Maryville College.....	Rev. Samuel T. Wilson, D. D.
Memphis.....	Christian Brothers College.....	Brother Maurelian, F. S. C.
Milligan.....	Milligan College.....	Frederick D. Kershner, A. M.
Nashville.....	Fisk University.....	H. H. Wright, dean.
Do.....	University of Nashville.....	James D. Porter, LL. D.
Do.....	Vanderbilt University.....	James H. Kirkland, LL. D., chancellor.
Do.....	Walden University.....	Rev. John A. Kumler, D. D.
Sewanee.....	University of the South.....	Wm. B. Hall, acting vice-chancellor.
Spencer.....	Burritt College.....	W. N. Billingsley, A. M.
Sweetwater.....	Hiwassee College.....	Rev. Eugene Blake, D. D.
TEXAS.		
Austin.....	St. Edward's College.....	Rev. Patrick J. Carroll, C. S. C.
Do.....	University of Texas.....	Sidney E. Mezes, Ph. D.
Brownwood.....	Howard Payne College.....	John H. Humphries, acting.
College Station.....	Agricultural and Mechanical College of Texas.....	Robert T. Milner.
Forth Worth.....	Fort Worth University.....	Rev. William Fielder, D. D.
Do.....	Polytechnic College.....	Rev. H. A. Boaz, D. D.
Galveston.....	St. Mary's University.....	Rev. A. E. Otis, S. J.
Georgetown.....	Southwestern University.....	Robert S. Hyer, LL. D.
North Waco.....	Texas Christian University.....	Clinton Lockhart, LL. D.
San Antonio.....	St. Louis College.....	Rev. Louis A. Traggesser, S. M.
Sherman.....	Austin College.....	Rev. Thomas S. Clyde, D. D.
Tehuacana.....	Westminster College.....	H. H. Price.
Waco.....	Baylor University.....	Samuel P. Brooks, LL. D.
Do.....	Paul Quinn College.....	Rev. William J. Laws, D. D.
Waxahachie.....	Trinity University.....	Samuel Lee Hornbeak, LL. D.
UTAH.		
Logan.....	Agricultural College of Utah.....	John A. Widtsoe.
Do.....	Brigham Young College.....	James H. Linford, B. S.
Salt Lake City.....	University of Utah.....	Joseph T. Kingsbury, Ph. D.
Do.....	Westminster College.....	Rev. M. H. Stevenson.
VERMONT.		
Burlington.....	University of Vermont.....	Rev. M. H. Buckham, LL. D.
Middlebury.....	Middlebury College.....	Rev. John Martin Thomas, D. D.
Northfield.....	Norwich University.....	Charles H. Spooner, LL. D.
VIRGINIA.		
Ashland.....	Randolph-Macon College.....	Robert E. Blackwell, LL. D.
Blacksburg.....	Virginia Agricultural and Mechanical College and Polytechnic Institute.....	P. B. Barringer, LL. D.
Bridgewater.....	Bridgewater College.....	W. B. Yount, Ph. B.
Charlottesville.....	University of Virginia.....	E. A. Alderman, LL. D.
Emory.....	Emory and Henry College.....	Rev. R. G. Waterhouse, D. D.
Fredericksburg.....	Fredericksburg College.....	Rev. J. W. Rosebro, D. D., acting.
Hampden-Sidney.....	Hampden-Sidney College.....	Henry T. Graham.
Lexington.....	Virginia Military Institute.....	Edward W. Nichols, supt.
Do.....	Washington and Lee University.....	George H. Denny, LL. D.
Lynchburg.....	Virginia Christian College.....	Joseph Hopwood, A. M.
Richmond.....	Richmond College.....	F. W. Boatwright, LL. D.
Do.....	Virginia Union University.....	Rev. George R. Hovey, D. D.
Salem.....	Roanoke College.....	Rev. John A. Morehead, D. D.
Williamsburg.....	College of William and Mary.....	L. G. Tyler, LL. D.
WASHINGTON.		
Pullman.....	State College of Washington.....	E. A. Bryan, LL. D.
Seattle.....	University of Washington.....	Thomas F. Kane, Ph. D.
Spokane.....	Gonzaga College.....	Rev. H. J. Goller, S. J.
Tacoma.....	University of Puget Sound.....	J. C. Zeller.
Do.....	Whitworth College.....	Rev. Borend H. Kroeze, D. D.
Walla Walla.....	Whitman College.....	Rev. S. B. L. Penrose, D. D.
WEST VIRGINIA.		
Barboursville.....	Morris Harvey College.....	D. W. Shaw, A. M.
Bethany.....	Bethany College.....	T. E. Cramblet, LL. D.
Buckhannon.....	Wesleyan University.....	Carl G. Downey, Ph. D.
Elkins.....	Davis and Elkins College.....	M. C. Allaben, A. B.
Morgantown.....	West Virginia University.....	D. B. Purinton, LL. D.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

1.—Universities and colleges for men and for both sexes, and schools of technology—Con.

Location.	University or college.	Name of president.
WISCONSIN.		
Appleton.....	Lawrence College.....	Rev. S. Plantz, Ph. D.
Beloit.....	Beloit College.....	Rev. Edward D. Eaton, LL. D.
Madison.....	University of Wisconsin.....	Charles R. Van Hise, Ph. D.
Milton.....	Milton College.....	Rev. Wm. C. Daland, D. D.
Milwaukee.....	Concordia College.....	Rev. M. J. F. Albrecht.
Do.....	Marquette College.....	Rev. James McCabe, S. J.
Plymouth.....	Mission House.....	Rev. E. G. Krampe.
Ripon.....	Ripon College.....	Rev. Richard C. Hughes, D. D.
Watertown.....	Northwestern University.....	Rev. A. F. Ernst.
Waukesha.....	Carroll College.....	Rev. W. O. Carrier, D. D.
WYOMING.		
Laramie.....	University of Wyoming.....	Charles O. Merica, LL. D.

2.—Colleges for women.

Location.	University or college.	Name of president.
ALABAMA.		
Athens.....	Athens Female College.....	Miss Mary N. Moore.
Eufaula.....	Alabama Brenau College.....	Thos. G. Wilkinson.
Marion.....	Judson College.....	Rev. Robert G. Patrick, D. D.
Do.....	Marion Female Seminary.....	Rev. L. W. Brown.
Talladega.....	Alabama Synodical College for Women.....	Rev. T. Peyton Walton.
Tuscaloosa.....	Central Female College.....	Rev. B. F. Giles, A. M.
Do.....	Tuscaloosa Female College.....	R. J. Holston, A. M.
Tuskegee.....	Alabama Conference Female College.....	John Massey, LL. D.
ARKANSAS.		
Conway.....	Central Baptist College.....	W. W. Rivers, A. M.
CALIFORNIA.		
Mills College.....	Mills College.....	Luella Clay Carson.
San Jose.....	College of Notre Dame.....	Sister Mary Bernardine.
DISTRICT OF COLUMBIA.		
Washington.....	Trinity College.....	Sister Julia.
FLORIDA.		
Tallahassee.....	Florida State College for Women.....	Edward Conrath.
GEORGIA.		
Athens.....	Lucy Cobb Institute.....	Susan G. Gerdine.
College Park.....	Cox College.....	John W. Gaines.
Cuthbert.....	Andrew Female College.....	J. W. Malone.
Dalton.....	Dalton Female College.....	Geo. S. Fulton.
Decatur.....	Agnes Scott College.....	Rev. F. H. Gaines, D. D.
Forsyth.....	Bessie Tift College.....	C. H. S. Jackson, A. M.
Gainesville.....	Brenau College.....	A. W. Van Hoose; H. J. Pearce.
Lagrange.....	Lagrange Female College.....	Rufus W. Smith, A. M.
Do.....	Southern Female College.....	M. W. Hutton, A. M.
Macon.....	Wesleyan Female College.....	Wm. N. Ainsworth.
Rome.....	Shorter College.....	T. J. Simmons, A. M.
ILLINOIS.		
Jacksonville.....	Illinois Woman's College.....	Rev. Joseph R. Harker, Ph. D.
Knoxville.....	St. Mary's School.....	Rev. C. W. Leffingwell, D. D. rector.
Rockford.....	Rockford College.....	Julia H. Gulliver, Ph. D.
INDIANA.		
Notre Dame.....	St. Mary's College and Academy.....	Mother M. Pauline.
KANSAS.		
Topeka.....	College of the Sisters of Bethany.....	Rev. F. R. Millsbaugh, D. D.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

2.—Colleges for women—Continued.

Location.	University or college.	Name of president.
KENTUCKY.		
Bowling Green.....	Potter College.....	Rev. Benj. F. Cabell, D. D.
Danville.....	Caldwell College.....	John C. Acheson, A. M.
Glasgow.....	Liberty College.....	Robert E. Hatton, Ph. D.
Harrodsburg.....	Beaumont College.....	Thomas Smith, A. M.
Hopkinsville.....	Bethel Female College.....	Harry G. Brownell.
Lexington.....	Hamilton College for Women.....	H. G. Shearin, Ph. D.
Do.....	Sayre Female Institute.....	Rev. J. M. Spencer.
Millersburg.....	Millersburg Female College.....	Rev. C. C. Fisher, A. M.
Nicholasville.....	Jessamine Female Institute.....	Mrs. J. B. Stears.
Owensboro.....	Owensboro Female College.....	J. Dyrton La Rue.
Russellville.....	Logan Female College.....	E. D. Atkins, A. M.
Versailles.....	Margaret College.....	Thomas C. Walton, Ph. D.
LOUISIANA.		
Clinton.....	Silliman Collegiate Institute.....	Rev. H. H. Brownlee.
Mansfield.....	Mansfield Female College.....	T. S. Sligh, A. M.
New Orleans.....	H. Sophie Newcomb Memorial College.....	Brandt V. B. Dixon, LL. D.
MARYLAND.		
Baltimore.....	Woman's College of Baltimore.....	Rev. Eugene A. Noble, D. D.
Frederick.....	Woman's College.....	J. H. Apple, A. M.
Hagerstown.....	Kee Mar College.....	Rev. S. M. Newman.
Lutherville.....	Maryland College for Young Ladies.....	Rev. Chas. W. Gallagher, D. D.
MASSACHUSETTS.		
Auburndale.....	Lasell Seminary for Young Women.....	G. M. Winslow, Ph. D., principal.
Boston.....	Simmons College.....	Henry Lefavour, LL. D.
Cambridge.....	Radcliffe College.....	Le Baron R. Briggs, LL. D.
Northampton.....	Smith College.....	Rev. Marion Le Roy Burton, Ph.D.
South Hadley.....	Mount Holyoke College.....	Mary E. Woolley, L. H. D.
Wellesley.....	Wellesley College.....	Miss Caroline Hazard, LL. D.
MINNESOTA.		
Albert Lea.....	Albert Lea College.....	Mary L. Marquis, A. M.
MISSISSIPPI.		
Blue Mountain.....	Blue Mountain Female College.....	B. G. Lowrey, A. M.
Brookhaven.....	Whitworth Female College.....	Rev. I. W. Cooper, D. D.
Clinton.....	Hillman College.....	W. J. Lowrey.
Columbus.....	Industrial Institute and College.....	Henry L. Whitfield.
French Camp.....	Central Mississippi Institute.....	J. A. Sanderson, principal.
Jackson.....	Belhaven College for Young Ladies.....	J. R. Preston.
Meridian.....	Meridian Woman's College.....	J. W. Beeson, A. M.
Natchez.....	Stanton College for Young Ladies.....	J. K. Morrison.
Pontotoc.....	Chickasaw Female College.....	Miss Katherine E. Crawford.
Port Gibson.....	Port Gibson Female College.....	Henry G. Hawkins, A. B.
MISSOURI.		
Columbia.....	Christian College.....	Mrs. W. T. Moore.
Do.....	Stephens College.....	William B. Peeler.
Fayette.....	Howard Payne College.....	Rev. Henry E. Stout.
Fulton.....	Synodical Female College.....	Mary Lee Allison.
Lexington.....	Central Female College.....	G. M. Gibson.
Do.....	Lexington College for Young Women.....	Edward W. White, A. M.
Liberty.....	Liberty Ladies College.....	C. M. Williams, A. M.
Mexico.....	Hardin College.....	J. W. Million, A. M.
Nevada.....	Cotter College for Young Ladies.....	Mrs. V. A. C. Stockard.
St. Charles.....	Lindenwood College for Women.....	Rev. George F. Ayres, Ph. D.
NEW JERSEY.		
Convent Station.....	College of St. Elizabeth.....	Sister M. Pauline Kellgher.
NEW YORK.		
Aurora.....	Wells College.....	Rev. George M. Ward, LL. D.
Elmira.....	Elmira College.....	Rev. A. C. Mackenzie, LL. D.
Geneva.....	Wm. Smith College.....	Rev. L. C. Stewardson.
New Rochelle.....	College of St. Angela.....	Rev. M. C. O'Farrell.
New York.....	Barnard College.....	Wm. T. Brewster, acting dean.
Poughkeepsie.....	Vassar College.....	Rev. J. M. Taylor, LL. D.

III.—UNIVERSITY AND COLLEGE PRESIDENTS—Continued.

2.—Colleges for women—Continued.

Location.	University or college.	Name of president.
NORTH CAROLINA.		
Charlotte.....	Elizabeth College.....	Rev. C. B. King, D. D.
Greensboro.....	Greensboro Female College.....	Mrs. Lucy H. Robertson.
Hickory.....	Claremont Female College.....	Joseph L. Murphy.
Louisburg.....	Louisburg Female College.....	Mrs. Ivey Allen.
Murfreesboro.....	Chowan Baptist Female Institute.....	John C. Scarborough, A. B.
Oxford.....	Oxford Female Seminary.....	F. P. Hobgood, A. M.
Raleigh.....	Meredith College.....	Rev. R. T. Vann, D. D.
Red Springs.....	Southern Presbyterian College.....	Rev. C. G. Vardell, D. D.
Salem.....	Salem Female Academy and College.....	Rev. Howard E. Rondthaler.
Statesville.....	Statesville Female College.....	Rev. John A. Scott, D. D.
OHIO.		
Oxford.....	Oxford College for Women.....	Jane Sherzer, Ph. D.
Do.....	Western College for Women.....	Rev. John D. Newman, D. D.
Painesville.....	Lake Erie College.....	Miss Mary Evans, Litt. D.
PENNSYLVANIA.		
Allentown.....	Allentown College for Women.....	Rev. Wm. F. Curtis.
Beaver.....	Beaver College.....	Rev. Wm. W. Foster, jr., D. D.
Blairsville.....	Blairsville College.....	Magnus C. Ihlseng.
Bryn Mawr.....	Bryn Mawr College.....	Miss M. Carey Thomas, LL. D.
Chambersburg.....	Wilson College.....	M. H. Reaser, Ph. D.
Mechanicsburg.....	Irving Female College.....	E. E. Campbell, Ph. D.
Pittsburg.....	Pennsylvania College for Women.....	Rev. Henry D. Lindsay, D. D.
SOUTH CAROLINA.		
Columbia.....	Columbia Female College.....	Rev. W. W. Daniel, D. D.
Do.....	College for Women.....	Miss Euphemia McClintock, A. B.
Due West.....	Due West Female College.....	Rev. James Boyce, D. D.
Greenville.....	Greenville Female College.....	Edward C. James, Litt. D.
Greenwood.....	Lander Female College.....	Rev. John O. Willson, D. D.
Spartanburg.....	Converse College.....	Robert P. Pell, Litt. D.
Union.....	Clifford Seminary.....	Rev. B. G. Clifford, Ph. D.
TENNESSEE.		
Bristol.....	Sullins College.....	W. E. Martin, Ph. D.
Franklin.....	Tennessee Female College.....	T. E. Allen.
Gallatin.....	Howard Female College.....	Amos L. Edwards, B. S.
Jackson.....	Memphis Conference Female Institute.....	Rev. A. B. Jones, LL. D.
Murfreesboro.....	Tennessee College.....	Geo. J. Burnett, A. M.
Nashville.....	Belmont College for Young Women.....	Rev. Ira Landrith, LL. D.
Do.....	Boscobel College.....	Mrs. J. O. Rust.
Pulaski.....	Martin College.....	W. T. Wynn, A. B.
Rogersville.....	Synodical Female College.....	Lawrence Rolfe, A. B.
TEXAS.		
Belton.....	Baylor Female College.....	W. A. Wilson, D. D.
Bonham.....	Carlton College.....	Rev. C. T. Carlton, A. B.
Bryant.....	Texas Woman's College.....	Richard McDonald.
San Antonio.....	San Antonio Female College.....	Rev. J. E. Harrison, A. B.
Sherman.....	North Texas Female College.....	Mrs. Lucy A. Kidd-Key.
South Houston.....	Asgard College.....	Rev. J. L. Dickens, LL. D.
VIRGINIA.		
Abingdon.....	Martha Washington College.....	S. D. Long.
Do.....	Stonewall Jackson Institute.....	Mrs. M. M. Hunt, principal.
Bristol.....	Bristol Institute.....	J. T. Henderson, A. M.
Charlottesville.....	Rawlings Institute.....	
Danville.....	Roanoke College of Danville.....	John B. Brewer, A. M.
Hollins.....	Hollins Institute.....	Miss Matty L. Cocke.
Lynchburg.....	Randolph-Macon Woman's College.....	W. W. Smith, LL. D.
Marion.....	Marion College.....	Rev. J. J. Scherer, D. D.
Petersburg.....	Southern Female College.....	Arthur K. Davis, A. M.
Richmond.....	Woman's College.....	Rev. James Nelson, D. D.
Roanoke.....	Virginia College for Young Ladies.....	Miss Mattie P. Harris.
Winchester.....	Episcopal Institute.....	W. C. Marshall, principal.
WEST VIRGINIA.		
Charlestown.....	Powhatan College.....	Stewart P. Hatton, LL. D.
Lewisburg.....	Lewisburg Female Institute.....	Rev. R. L. Telford, D. D.
WISCONSIN.		
Milwaukee.....	Milwaukee-Downer College.....	Miss Ellen C. Sabin, A. M.

IV.—PROFESSORS OF PEDAGOGY AND HEADS OF DEPARTMENTS OF PEDAGOGY IN UNIVERSITIES AND COLLEGES.

Location.	University or college.	Name of professor or head of department.
University, Ala.....	University of Alabama.....	Fletcher B. Dresslar, Ph. D.
Fayetteville, Ark.....	University of Arkansas.....	Wm. S. Johnson, Ph. D.
Berkeley, Cal.....	University of California.....	A. F. Lange, Ph. D.
Los Angeles, Cal.....	University of Southern California.....	James H. Hoose, Ph. D.
Do.....	Occidental College.....	George F. Cook, Ph. D.
Pasadena, Cal.....	Throop Polytechnic Institute.....	A. H. Chamberlain, A. M.
Stanford University, Cal.....	Leland Stanford Junior University.....	Ellwood P. Cubberley, Ph. D.
Boulder, Colo.....	University of Colorado.....	Vivian A. C. Ilenmon, Ph. D.
Colorado Springs, Colo.....	Colorado College.....	H. A. Ruger, A. B.
University Park, Colo.....	University of Denver.....	D. E. Phillips, Ph. D.
Washington, D. C.....	George Washington University.....	Williston S. Hough, Ph. M.
Do.....	Howard University.....	Lewis B. Moore, Ph. D.
De Land, Fla.....	John B. Stetson University.....	Lincoln Hulley, Ph. D., president.
Gainesville, Fla.....	University of Florida.....	John A. Thackston, Ph. D.
Athens, Ga.....	University of Georgia.....	T. J. Wooster, Ph. D.
Atlanta, Ga.....	Atlanta University.....	George A. Towns, A. M.
Dahlonega, Ga.....	North Georgia Agricultural College.....	Gustavus R. Glenn, LL. D., pres.
South Atlanta, Ga.....	Clark University.....	
Moscow, Idaho.....	University of Idaho.....	Phillip Soulen, A. M.
Chicago, Ill.....	University of Chicago.....	Chas. H. Judd, Ph. D.
Decatur, Ill.....	James Millikin University.....	A. R. Taylor, Ph. D., president.
Eureka, Ill.....	Eureka College.....	Elizabeth Baxter, A. B.
Evanston, Ill.....	Northwestern University.....	Herbert F. Fisk, LL. D.
Greenville, Ill.....	Greenview College.....	Candis J. Nelson, A. B.
Urbana, Ill.....	University of Illinois.....	W. C. Bagley, Ph. D.
Bloomington, Ind.....	Indiana University.....	Wm. W. Black, A. M.
Crawfordsville, Ind.....	Wabash College.....	George H. Tapp, A. B.
Earlham, Ind.....	Earlham College.....	J. H. Coffin, Ph. D.
Greencastle, Ind.....	De Pauw University.....	Rufus B. Von Kleinsmid, A. M.
Hanover, Ind.....	Hanover College.....	Wm. A. Millis, LL. D., president.
Indianapolis, Ind.....	Butler College.....	Arthur K. Rogers, Ph. D.
Moore's Hill, Ind.....	Moore's Hill College.....	Zenos E. Scott.
Oakland City, Ind.....	Oakland City College.....	
Cedar Rapids, Iowa.....	Coe College.....	G. C. Fracker, Ph. D.
Charles City, Iowa.....	Charles City College.....	Frederick Schaub, A. M.
Des Moines, Iowa.....	Des Moines College.....	James P. Stephenson, Ph. D.
Do.....	Drake University.....	William F. Barr, Ph. D.
Fairfield, Iowa.....	Parsons College.....	Ward W. Silver, A. M.
Fayette, Iowa.....	Upper Iowa University.....	A. E. Bennett, A. M.
Indianola, Iowa.....	Simpson College.....	Charles E. Shelton, LL. D., pres.
Iowa City, Iowa.....	State University of Iowa.....	F. E. Bolton, Ph. D.
Lamoni, Iowa.....	Graceland College.....	R. M. Stewart, A. B.
Mount Pleasant.....	Iowa Wesleyan University.....	Elmer E. Lymer, B. S.
Mount Vernon, Iowa.....	Cornell College.....	George H. Betts, Ph. M.
Sioux City, Iowa.....	Morningside College.....	E. A. Brown, A. M.
Tabor, Iowa.....	Tabor College.....	J. F. Crawford, A. M.
Atehison, Kans.....	Midland College.....	Harold W. Foght, A. M.
Baldwin, Kans.....	Baker University.....	Lilian Scott, Ph. B.
Emporia, Kans.....	Emporia College.....	Mary A. Ludlum, A. M.
Holton, Kans.....	Campbell College.....	W. S. Reese, Ph. M.
Lawrence, Kans.....	University of Kansas.....	A. S. Olin, A. M.
Lindsborg, Kans.....	Bethany College.....	Anna A. Carlson.
McPherson, Kans.....	McPherson College.....	John A. Clement, A. M.
Ottawa, Kans.....	Ottawa University.....	Herbert H. Foster, Ph. D.
Salina, Kans.....	Kansas Wesleyan University.....	Albert H. King, M. Ped.
Sterling, Kans.....	Cooper College.....	Elizabeth Duff.
Topeka, Kans.....	Washburn College.....	Emil C. Wiln, Ph. D.
Wichita, Kans.....	Fairmount College.....	Herbert L. Wilbur, A. M.
Do.....	Friends University.....	B. W. Truesdell, A. B.
Winfield, Kans.....	Southwest Kansas College.....	Henrietta V. Race, A. B.
Berea, Ky.....	Berea College.....	John W. Dinsmore, A. M.
Danville, Ky.....	Central University of Kentucky.....	Geo. J. Ramsey, LL. D.
Lexington, Ky.....	State University.....	James T. Noe, A. M.
Baton Rouge, La.....	Louisiana State University.....	Alexander B. Coffey, Ph. D., dean.
New Orleans, La.....	H. Sophie Newcomb Memorial College.....	Margaret E. Cross.
Do.....	Leland University.....	R. W. Perkins, Ph. D., president.
Do.....	Tulane University of Louisiana.....	Joseph M. Gwinn, A. M.
Brunswick, Me.....	Bowdoin College.....	Wm. T. Foster.
Orono, Me.....	University of Maine.....	Chas. Davidson, Ph. D.
Baltimore, Md.....	Johns Hopkins University.....	Edward F. Buchner, Ph. D.
Do.....	Morgan College.....	Chas. A. Johnson, A. B.
Chestertown, Md.....	Washington College.....	Robt. H. Gault, Ph. D.
Boston, Mass.....	Simmons College.....	Mary E. Parker, A. M.
Cambridge, Mass.....	Harvard University.....	Paul H. Hanus, LL. D.
South Hadley, Mass.....	Mount Holyoke College.....	Wm. C. Moore, A. M.
Wellesley, Mass.....	Wellesley College.....	Anna J. McKeag, Ph. D.
Worcester, Mass.....	Clark University.....	W. H. Burnham, Ph. D.
Do.....	Collegiate Department, Clark University.....	Rufus C. Bentley, A. M., dean.
Adrian, Mich.....	Adrian College.....	Sarah J. Knott, M. S.

IV.—PROFESSORS OF PEDAGOGY AND HEADS OF DEPARTMENTS OF PEDAGOGY IN UNIVERSITIES AND COLLEGES—Continued.

Location.	University or college.	Name of professor or head of department.
Alma, Mich.....	Alma College.....	Albert P. Cook.
Ann Arbor, Mich.....	University of Michigan.....	Allen S. Whitney, A. B.
Hillsdale, Mich.....	Hillsdale College.....	Charles H. Gurney, A. M.
Holland, Mich.....	Hope College.....	John E. Knizenga, A. M.
Kalamazoo, Mich.....	Kalamazoo College.....	Herbert L. Stetson, LL. D.
Olivet, Mich.....	Olivet College.....	E. G. Lancaster, Ph. D., president.
Minneapolis, Minn.....	University of Minnesota.....	George F. James, Ph. D.
St. Paul, Minn.....	Macalester College.....	Andrew W. Anderson, A. M.
Winnebago, Minn.....	Parker College.....	Elbert Wayland Van Aken, A. M., president.
University, Miss.....	University of Mississippi.....	
Columbia, Mo.....	University of Missouri.....	J. L. Meriam, Ph. D.
St. Louis, Mo.....	Washington University.....	Edgar J. Swift, Ph. D.
Missoula, Mont.....	University of Montana.....	Wm. F. Book, Ph. D.
Bellevue, Nebr.....	Bellevue College.....	Wm. C. T. Adams, Ph. D.
Bethany, Nebr.....	Cotner University.....	Jas. A. Beattie, LL. D.
College View, Nebr.....	Union College.....	Charles C. Lewis, president.
Grand Island, Nebr.....	Grand Island College.....	John L. Beyl, Ph. D.
Hastings, Nebr.....	Hastings College.....	Albert G. Owen, A. M.
Lincoln, Nebr.....	University of Nebraska.....	Charles Fordyce, Ph. D., dean.
University Place, Nebr.....	Nebraska Wesleyan University.....	Wm. R. Jackson, A. M.
York, Nebr.....	York College.....	M. Lillie Irwin, B. S.
Reno, Nev.....	University of Nevada.....	Romanzo Adams, Ph. M.
Hanover, N. H.....	Dartmouth College.....	
New Brunswick, N. J.....	Rutgers College.....	E. R. Payson, Ph. D.
Albuquerque, N. Mex.....	University of New Mexico.....	Charles E. Hodgkin, B. Ped.
Alfred, N. Y.....	Alfred University.....	Clarence L. Clarke, Ph. B.
Brooklyn, N. Y.....	Adelphi College.....	E. N. Henderson, A. M.
Do.....	Polytechnic Institute of Brooklyn.....	Fred W. Atkinson, Ph. D.
Canton, N. Y.....	St. Lawrence University.....	Robt. D. Ford, M. S.
Clinton, N. Y.....	Hamilton College.....	W. H. Squires, Ph. D.
Elmira, N. Y.....	Elmira College.....	Vida F. Moore, Ph. D.
Hamilton, N. Y.....	Colgate University.....	M. S. Read, Ph. D.
Ithaca, N. Y.....	Cornell University.....	Charles De Garmo, Ph. D.
New York, N. Y.....	College of the City of New York.....	Stephen P. Duggan, Ph. D.
Do.....	Columbia University (Teachers College).....	James E. Russell, LL. D., dean.
Do.....	New York University.....	T. M. Balliet, Ph. D.
Rochester, N. Y.....	University of Rochester.....	George M. Forbes, A. M.
Syracuse, N. Y.....	Syracuse University.....	J. R. Street, Ph. D.
Chapel Hill, N. C.....	University of North Carolina.....	Marcus C. S. Noble.
Durham, N. C.....	Trinity College.....	Eugene C. Brooks, A. B.
Salisbury, N. C.....	Livingstone College.....	W. R. Connors, A. B.
Wake Forest, N. C.....	Wake Forest College.....	J. Henry Highsmith.
University, N. Dak.....	University of North Dakota.....	Joseph Kennedy, A. M.
Alliance, Ohio.....	Mount Union College.....	John B. Bowman, A. M.
Ashland, Ohio.....	Ashland College.....	L. Leedy Garber, A. M.
Berea, Ohio.....	Baldwin University.....	Fletcher D. Ward, B. S.
Cincinnati, Ohio.....	University of Cincinnati.....	Wm. P. Burris, A. M., dean.
Columbus, Ohio.....	Ohio State University.....	Frank P. Graves, Ph. D.
Oberlin, Ohio.....	Oberlin College.....	Edward A. Miller, A. B.
Tiffin, Ohio.....	Heidelberg University.....	Aaron W. Ricksecker, A. B.
Westerville, Ohio.....	Otterbein University.....	Thomas J. Sanders, Ph. D.
Wilberforce, Ohio.....	Wilberforce University.....	Sarah C. B. Scarborough, M. Pd.
Yellow Springs, Ohio.....	Antioch College.....	W. W. Weaver, A. M.
Oklahoma City, Okla.....	Epworth University.....	Benj. F. Nihart, B. S.
Eugene, Oreg.....	University of Oregon.....	H. D. Shelden, Ph. D.
Salem, Oreg.....	Willamette University.....	Mary E. Reynolds, B. S.
Allentown, Pa.....	Muhlenberg College.....	G. T. Ettinger, Ph. D.
Carlisle, Pa.....	Dickinson College.....	Wm. L. Gooding, Ph. D.
Collegeville, Pa.....	Ursinus College.....	Geo. L. Omwake, A. M., dean.
Bryn Mawr, Pa.....	Bryn Mawr College.....	James H. Leuba, Ph. D.
Huntingdon, Pa.....	Juniata College.....	J. H. Brumbaugh.
Lewisburg, Pa.....	Bucknell University.....	Thomas A. Edwards, A. M.
Philadelphia, Pa.....	Central High School.....	Francis B. Brandt, Ph. D.
Do.....	Temple University.....	Herbert Stotesbury, Ph. D.
Do.....	University of Pennsylvania.....	A. D. Yocum, Ph. D.
Pittsburg, Pa.....	University of Pittsburgh.....	E. B. Huey, Ph. D.
Selinsgrove, Pa.....	Susquehanna University.....	William Noetling, A. M.
Providence, R. I.....	Brown University.....	W. B. Jacobs, A. M.
Columbia, S. C.....	University of South Carolina.....	Patterson Wardlaw, A. B.
Orangeburg, S. C.....	Claffin University.....	G. LeRoy Noyes, A. B.
Brookings, S. Dak.....	South Dakota Agricultural College.....	Rufus B. McClenon, A. M.
Mitchell, S. Dak.....	Dakota Wesleyan University.....	Samuel Weir, Ph. D.
Vermilion, S. Dak.....	University of South Dakota.....	A. W. Trettien, Ph. D.
Yankton, S. Dak.....	Yankton College.....	Henry K. Warren, LL. D.
Knoxville, Tenn.....	University of Tennessee.....	P. F. Claxton, A. M.
Austin, Tex.....	University of Texas.....	W. S. Sutton, LL. D.
Waco, Tex.....	Baylor University.....	Frederick Eby, Ph. D.
Logan, Utah.....	Brigham Young College.....	Daniel C. Jensen, A. B.
Salt Lake City, Utah.....	University of Utah.....	Wm. M. Stewart, M. Di.

IV.—PROFESSORS OF PEDAGOGY AND HEADS OF DEPARTMENTS OF PEDAGOGY IN UNIVERSITIES AND COLLEGES—Continued.

Location.	University or college.	Name of professor or head of department.
Charlottesville, Va.....	University of Virginia.....	Wm. H. Heck, A. M.
Emory, Va.....	Emory and Henry College.....	J. P. McConnell, Ph. D., acting.
Lynchburg, Va.....	Randolph-Macon Woman's College.....	Wilmot B. Lane, Ph. D.
Salem, Va.....	Roanoke College.....	F. V. N. Painter, A. M.
Williamsburg, Va.....	College of William and Mary.....	Henry E. Bennett, A. B.
Pullman, Wash.....	State College of Washington.....	
Seattle, Wash.....	University of Washington.....	Edward O. Sisson, Ph. D.
Morgantown, W. Va.....	West Virginia University.....	Jasper N. Deahl, A. M.
Beloit, Wis.....	Beloit College.....	Almon W. Burr, A. M.
Madison, Wis.....	University of Wisconsin.....	M. Vincent O'Shea, B. L.
Ripon, Wis.....	Ripon College.....	Wm. J. Mutch, Ph. D.
Waukesha, Wis.....	Carroll College.....	James E. Rogers, Ph. D.
Laramie, Wyo.....	University of Wyoming.....	C. F. Buckle, Ph. D.

V.—PRINCIPALS OF NORMAL SCHOOLS.

1.—Public normal schools.

Location.	Name of institution.	Principal.
ALABAMA.		
Daphne.....	Daphne State Normal School.....	B. B. Baker.
Florence.....	State Normal College.....	Marshall C. Wilson.
Jacksonville.....	do.....	C. W. Daugette.
Livingston.....	Alabama Normal College for Girls.....	Miss Julia S. Tutwiler.
Montgomery.....	State Colored Normal School.....	Wm. B. Patterson.
Normal.....	Agricultural and Mechanical College for Negroes.	Walter H. Burhannan.
Troy.....	State Normal College.....	E. M. Shackelford.
ARIZONA.		
Flagstaff.....	Northern Arizona Normal School.....	R. H. H. Blome.
Tempe.....	Tempe Normal School of Arizona.....	A. J. Matthews.
ARKANSAS.		
Conway.....	Arkansas State Normal School.....	J. J. Doynie.
Pine Bluff.....	Branch Normal College (colored). ..	Isaac Fisher.
CALIFORNIA.		
Chico.....	California State Normal School.....	Chas. C. Van Liew.
Los Angeles.....	State Normal School.....	Jesse F. Millsbaugh.
San Diego.....	do.....	Samuel T. Black.
San Francisco.....	do.....	Frederick Burk.
San Jose.....	do.....	Morris Elmer Dailey.
COLORADO.		
Greeley.....	Colorado State Normal School.....	Z. X. Snyder.
CONNECTICUT.		
Bridgeport.....	Bridgeport Training School.....	Besse E. Howes.
Danbury.....	State Normal School.....	John R. Perkins.
New Britain.....	Normal Training School.....	Marcus White.
New Haven.....	State Normal Training School.....	Arthur B. Morrill.
Willimantic.....	do.....	Henry T. Burr.
DISTRICT OF COLUMBIA.		
Washington.....	Washington Normal School No. 1.....	Anne M. Goding.
Do.....	Washington Normal School No. 2 (colored). ..	Lucy E. Moten.
FLORIDA.		
Tallahassee.....	Florida Agricultural and Mechanical College (colored). ..	Nathan B. Young.
GEORGIA.		
Athens.....	State Normal School.....	E. C. Branson.
Douglas.....	Southern Normal Institute.....	J. Walter Hendricks.
Milledgeville.....	Georgia Normal and Industrial College.....	M. M. Parks.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

1.—Public normal schools—Continued.

Location.	Name of institution.	Principal.
IDAHO.		
Albion.....	State Normal School.....	G. A. Axline.
Lewiston.....	...do.....	Geo. H. Black.
ILLINOIS.		
Carbondale.....	Southern Illinois State Normal University.	D. B. Parkinson.
Charleston.....	Eastern Illinois State Normal School.....	L. C. Lord.
Chicago, Station O.....	Chicago Normal School.....	Wm. B. Owen.
De Kalb.....	Northern Illinois State Normal School.....	John W. Cook.
Macomb.....	Western Illinois State Normal School.....	Alfred Bayliss.
Normal.....	Illinois State Normal University.....	David Felmley.
INDIANA.		
Indianapolis.....	Indianapolis Normal School.....	E. R. Ray.
Terre Haute.....	Indiana State Normal School.....	William W. Parsons.
IOWA.		
Cedar Falls.....	Iowa State Teachers College.....	Homer H. Seerley.
Woodbine.....	Woodbine Normal and Commercial School.	M. A. Reed.
KANSAS.		
Emporia.....	State Normal School.....	Joseph H. Hill.
Hays.....	Western Branch State Normal School.....	William S. Picken.
Pittsburg.....	State Manual Training Normal School.....	R. S. Russ.
KENTUCKY.		
Bowling Green.....	Western Kentucky State Normal School..	H. H. Cherry.
Frankfort.....	State Normal and Industrial Institute for Colored Persons.	John H. Jackson.
Louisville.....	Louisville Normal School.....	W. J. McConathy.
Richmond.....	Eastern Kentucky State Normal School..	Mary C. Roark, acting.
LOUISIANA.		
Natchitoches.....	Louisiana State Normal School.....	James B. Aswell.
New Orleans.....	New Orleans Normal School.....	Miss Margaret C. Hanson.
MAINE.		
Castine.....	Eastern State Normal School.....	Albert F. Richardson.
Farmington.....	Farmington State Normal School.....	George C. Purington.
Fort Kent.....	Madawaska Training School.....	Mary P. Nowland.
Gorham.....	Western State Normal School.....	Walter E. Russell.
Lee.....	Lee Normal Academy.....	John D. Whittier.
Presque Isle.....	Aroostook State Normal School.....	San Lorenzo Merriman.
Springfield.....	Springfield Normal School.....	Elmer H. Webber.
MARYLAND.		
Baltimore.....	Baltimore Teachers Training School.....	Sarah C. Brooks.
Do.....	Maryland State Normal School.....	Sarah E. Richmond.
Do.....	Maryland State Normal School for Colored Teachers.	Geo. Harrison.
Frostburg.....	Maryland State Normal School.....	Edward D. Murdaugh.
MASSACHUSETTS.		
Boston.....	Boston Normal School.....	Wallace C. Boyden.
Do.....	Massachusetts Normal Art School.....	George H. Bartlett.
Bridgewater.....	State Normal School.....	Albert G. Boyden.
Fitchburg.....	...do.....	John G. Thompson.
Frammingham.....	...do.....	Henry Whittemore.
Hyannis.....	...do.....	Wm. A. Baldwin.
Lowell.....	...do.....	Cyrus A. Durgin.
Do.....	Training School for Teachers.....	Gertrude Edmund.
North Adams.....	State Normal School.....	F. F. Murdock.
Salem.....	...do.....	Joseph Asbury Pitman.
Westfield.....	...do.....	Clarence A. Brodeur.
Worcester.....	...do.....	E. Harlow Russell.
MICHIGAN.		
Detroit.....	Washington Normal School.....	Chas. L. Spain.
Kalamazoo.....	Western State Normal School.....	Dwight B. Waldo.
Marquette.....	State Normal School.....	James H. B. Kaye.
Mount Pleasant.....	Central State Normal School.....	Chas. T. Grawn.
Ypsilanti.....	Michigan State Normal School.....	Lewis H. Jones.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

1.—Public normal schools—Continued.

Location.	Name of Institution.	Principal.
MINNESOTA.		
Duluth.....	State Normal School.....	E. W. Bohannon.
Mankato.....	do.....	Chas. H. Cooper.
Moorhead.....	do.....	Frank A. Weld.
St. Cloud.....	do.....	W. A. Shoemaker.
St. Paul.....	Teachers Training School.....	L. L. Everly.
Winona.....	State Normal School.....	G. E. Maxwell.
MISSISSIPPI.		
Shelby.....	Shelby Normal Institute.....	J. M. Williamson.
Sherman.....	Mississippi Normal Institute.....	John B. Thompson.
Walnut Grove.....	Mississippi Central Normal School.....	A. S. McClendon.
MISSOURI.		
Ava.....	Douglas County Normal School.....	J. A. Hylton.
Cape Girardeau.....	State Normal School.....	W. S. Dearmont.
Kirksville.....	State Normal School (first district).....	John R. Kirk.
Maryville.....	State Normal School.....	H. K. Taylor.
St. Louis.....	Teachers College.....	John W. Withers.
Springfield.....	State Normal School (fourth district).....	W. T. Carrington.
Warrensburg.....	State Normal School (second district).....	W. J. Hawkins.
MONTANA.		
Dillon.....	Montana State Normal School.....	Henry H. Swain.
NEBRASKA.		
Kearney.....	State Normal School.....	A. O. Thomas.
Peru.....	Nebraska State Normal School.....	J. W. Crabtree.
NEW HAMPSHIRE.		
Plymouth.....	State Normal School.....	J. E. Klock.
NEW JERSEY.		
Jersey City.....	Teachers Training School.....	Joseph H. Brensinger.
Montclair.....	New Jersey State Normal School.....	Chas. S. Chapin.
Newark.....	Newark Normal and Training School.....	W. S. Willis.
Paterson.....	Paterson Normal Training School.....	Frank W. Smith.
Trenton.....	New Jersey State Normal and Model Schools.....	James M. Green.
NEW MEXICO.		
Las Vegas.....	New Mexico Normal University.....	B. S. Gowen.
Silver City.....	Normal School of New Mexico.....	C. M. Light.
NEW YORK.		
Albany.....	New York State Normal College.....	Wm. J. Milne.
Do.....	Teachers Training School.....	J. D. Burks.
Brockport.....	State Normal and Training School.....	Charles T. McFarlane.
Brooklyn.....	Training School for Teachers.....	Emma L. Johnston.
Buffalo.....	State Normal School.....	James M. Cassey.
Cohoes.....	Cohoes Training School.....	Cora F. Bratton.
Cortland.....	State Normal and Training School.....	Francis J. Cheney.
Fredonia.....	do.....	Myron T. Dana.
Geneseo.....	Geneseo State Normal School.....	James V. Sturges.
New Paltz.....	State Normal School.....	John C. Bliss.
New York.....	New York Training School for Teachers.....	E. N. Jones.
Do.....	Normal College of the City of New York.....	George S. Davis.
Oneonta.....	State Normal School.....	Percy I. Bugbee.
Oswego.....	Oswego State Normal and Training School.....	Isaac D. Poucher.
Plattsburg.....	State Normal School.....	Geo. K. Hawkins.
Potsdam.....	State Normal and Training School.....	Thomas B. Stowell.
Rochester.....	Rochester Training School.....	Edith A. Scott.
Syracuse.....	Syracuse High School, Normal Department.....	G. A. Lewis.
NORTH CAROLINA.		
Elizabeth City.....	State Colored Normal School.....	P. W. Moore.
Fayetteville.....	do.....	E. E. Smith.
Greensboro.....	State Normal and Industrial School.....	J. I. Foust.
Painter.....	Cullowhee Normal and Industrial School.....	R. L. Madison.
Pembroke.....	Croaton Normal College.....	H. L. Edens.
Winston.....	Slater Industrial and State Normal School.....	C. G. O'Kelly.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

1.—Public normal schools—Continued.

Location.	Name of institution.	Principal.
NORTH DAKOTA.		
Mayville.....	State Normal School.....	Thos. A. Hillyer.
Valley City.....	do.....	Hugh S. Bufum.
OHIO.		
Akron.....	Perkins Normal School.....	Lee R. Knight.
Athens.....	State Normal School.....	Henry G. Williams.
Cleveland.....	Cleveland Normal Training School.....	James W. McLane.
Columbus.....	Columbus Normal School.....	Margaret W. Sutherland.
Dayton.....	Dayton Normal School.....	Grace A. Greene.
Oxford.....	State Normal School.....	H. C. Minnich.
Toledo.....	Toledo Normal Training School.....	Mrs. Ella M. R. Baird.
OKLAHOMA.		
Alva.....	Northwestern State Normal School.....	Walter L. Ross.
Edmond.....	Central State Normal School.....	J. A. McLauchlin.
Langston.....	Colored Agricultural and Normal University.	Inman E. Page.
Weatherford.....	Southwestern State Normal School.....	J. F. Sharp.
OREGON.		
Ashland.....	Southern Oregon State Normal School...	Clyde A. Payne, acting.
Drain.....	Central Oregon State Normal School.....	A. L. Briggs.
Monmouth.....	State Normal School.....	Edwin De Vore Ressler.
Weston.....	Eastern State Normal School.....	Robert Carver French.
PENNSYLVANIA.		
Bloomsburg.....	State Normal School.....	D. J. Waller, Jr.
California.....	Southwestern State Normal School.....	J. D. Meese, acting.
Clarion.....	Clarion State Normal School.....	J. George Becht.
East Stroudsburg.....	East Stroudsburg State Normal School...	E. L. Kemp.
Edinboro.....	State Normal School.....	John F. Bigler.
Indiana.....	Indiana Normal School of Pennsylvania...	James E. Ament.
Kutztown.....	Keystone State Normal School.....	A. C. Rothermel.
Lock Haven.....	Central State Normal School.....	J. R. Flickinger.
Mansfield.....	Mansfield State Normal School.....	Andrew T. Smith.
Millersville.....	First Pennsylvania State Normal School...	E. Oram Lyte.
Muncy.....	Lycoming County Normal School.....	H. A. Spotts.
Philadelphia.....	Philadelphia Normal School for Girls...	J. M. Willard.
Pittsburg.....	Pittsburg High School, Normal Department.	Jane Ralston.
Reading.....	Normal and Training School for Girls...	Martha R. Selders.
Shippensburg.....	Cumberland Valley State Normal School...	Samuel A. Martin.
Slippery Rock.....	Slippery Rock State Normal School.....	Albert E. Maltby.
West Chester.....	State Normal School.....	George M. Phillips.
RHODE ISLAND.		
Providence.....	Rhode Island State Normal School.....	John L. Alger.
SOUTH CAROLINA.		
Orangeburg.....	Colored Normal, Industrial, Agricultural, and Mechanical College of South Carolina.	Thos. E. Miller.
Rockhill.....	Winthrop Normal College.....	D. B. Johnson.
SOUTH DAKOTA.		
Aberdeen.....	Northern Normal and Industrial School...	Geo. W. Nash.
Madison.....	State Normal School.....	J. W. Heston.
Spearfish.....	do.....	F. L. Cook.
Springfield.....	do.....	G. G. Wenzlaff.
TENNESSEE.		
Nashville.....	Peabody Normal School.....	James D. Porter.
TEXAS.		
Denton.....	North Texas Normal School.....	W. H. Bruce.
Huntsville.....	Sam Houston Normal Institute.....	H. F. Estill.
Prairie View.....	Prairie View State Normal and Industrial College (colored).	Ed. L. Blackshear.
UTAH.		
Cedar City.....	Southern Branch of the State Normal School.	G. W. Decker.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

1.—Public normal schools—Continued.

Location.	Name of Institution.	Principal.
VERMONT.		
Castleton.....	State Normal School.....	Philip R. Leavenworth.
Johnson.....	do.....	Edward D. Collins.
Randolph Center.....	do.....	Charles H. Morrill.
VIRGINIA.		
Farmville.....	State Female Normal School.....	J. L. Jarman.
Hampton.....	Hampton Normal and Agricultural Institute.	H. B. Frissell.
Petersburg.....	Virginia Normal and Industrial Institute (colored).	J. H. Johnston.
WASHINGTON.		
Bellingham.....	State Normal School.....	Edward T. Mathes.
Cheney.....	do.....	Hiram C. Sampson.
Ellensburg.....	do.....	W. E. Wilson.
WEST VIRGINIA.		
Athens.....	State Normal School.....	C. L. Bemis.
Fairmount.....	do.....	U. S. Fleming.
Glenville.....	do.....	E. G. Rohrbough.
Huntington.....	Marshall College, State Normal School....	Lawrence J. Corbly.
Institute.....	West Virginia Colored Institute.....	J. McH. Jones.
Shepherdstown.....	Shepherd College, State Normal School....	Thomas C. Miller.
West Liberty.....	West Liberty State Normal School.....	John C. Shaw.
WISCONSIN.		
Gays Mills.....	Crawford County Training School.....	G. E. Pratt.
Ladysmith.....	Rusk County Normal School.....	R. H. Burns.
Manitowoc.....	Manitowoc County Teachers Training School.	Fred Christiansen.
Menomonie.....	Dunn County Teachers Training School...	G. L. Bowman.
Milwaukee.....	State Normal School.....	Charles McKenney.
Oshkosh.....	do.....	John A. H. Keith.
Platteville.....	do.....	W. J. Southerland.
Rice Lake.....	Barron County Training School for Teachers.	John E. Hale.
River Falls.....	River Falls State Normal School.....	W. J. Brier.
Stevens Point.....	State Normal School.....	John F. Sims.
Superior.....	Superior State Normal School.....	V. E. McCaskill.
Wausau.....	Marathon County Training School.....	O. E. Wells.
Whitewater.....	State Normal School.....	Albert Salisbury.

2.—Private normal schools.

Location.	Name of Institution.	Principal.
ALABAMA.		
Cullman.....	Normal Department, Polytechnic College and Ladies' Institute.	S. A. Fetter.
Mobile.....	Emerson Normal Institute.....	Rev. A. T. Burnell.
Snow Hill.....	Snow Hill Normal and Industrial Institute.	W. J. Edwards.
Tuskegee.....	Tuskegee Normal and Industrial Institute.	B. T. Washington.
ARKANSAS.		
Pea Ridge.....	Pea Ridge Masonic College.....	S. C. Parish.
CALIFORNIA.		
Berkeley.....	Oakland Kindergarten Training Class....	Grace E. Barnard.
Stockton.....	Western Normal School.....	J. R. Humphreys.
COLORADO.		
Denver.....	Denver Normal and Preparatory School..	R. A. Le Doux.
DISTRICT OF COLUMBIA.		
Washington.....	Kindergarten Normal Training School....	Miss Susan P. Pollock.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

2.—Private normal schools—Continued.

Location.	Name of institution.	Principal.
FLORIDA.		
Jasper.....	Jasper Normal Institute.....	Geo. M. Lynch.
Madison.....	Florida Normal Institute.....	W. B. Cate.
Orange Park.....	Orange Park Normal and Manual Training School.	Mrs. L. St. J. Hitchcock.
GEORGIA.		
Social Circle.....	Negro Normal and Industrial School.....	James A. Love.
Thomasville.....	Allen Normal and Industrial School.....	Abble B. Howland.
ILLINOIS.		
A Addison.....	German Evangelical Lutheran Teachers' Seminary	Theo. Brohm.
Chicago.....	Chicago Kindergarten College.....	Elizabeth Harrison.
Dixon.....	Dixon College and Normal School.....	W. H. Williamson.
Hoopeston.....	Greer College.....	E. L. Bailey.
Oregon.....	Wells School for Teachers.....	H. W. Sullivan.
Rushville.....	Rushville Normal and Business College.....	Maxwell Kennedy.
INDIANA.		
Danville.....	Central Normal College.....	G. W. Dunlavy.
Indianapolis.....	Teachers' College of Indianapolis.....	Eliza A. Blaker.
Marion.....	Marion Normal College.....	C. W. Boucher.
Rochester.....	Rochester Normal University.....	Wm. H. Banta.
IOWA.		
Bloomfield.....	Southern Iowa Normal School.....	H. C. Brown.
Denison.....	Denison Normal School.....	W. C. Van Ness.
Mason City.....	Memorial University, Normal Department.	Fred D. Cram.
Perry.....	Perry Normal School.....	C. D. Jones.
Shenandoah.....	Western Normal College, Shenandoah Commercial Institute and Musical Conservatory.	J. M. Hussey.
Waukon.....	Waukon Business College and Normal School.	W. L. Peck.
KANSAS.		
Nickerson.....	Nickerson College.....	E. B. Smith.
KENTUCKY.		
Hazard.....	Hazard Baptist Institute.....	W. H. Sasser.
Lexington.....	Chandler Normal School.....	Fannie J. Webster.
Louisa.....	Kentucky Normal College.....	Walter M. Byington.
Middleburg.....	Middleburg Normal College.....	J. S. Lawhorn.
Morehead.....	Morehead Normal School.....	F. C. Button.
LOUISIANA.		
New Orleans.....	Luther College.....	F. Wenger.
MASSACHUSETTS.		
Boston (1069 Boylston)..	Froebel School, Kindergarten Normal Classes.	Annie C. Rust.
Do.....	Kindergarten Training School.....	Lucy Wheelock.
Do.....	Perry Kindergarten Normal School.....	Annie M. Perry.
MICHIGAN.		
Detroit.....	Thomas Normal Training School.....	Jennie L. Thomas.
Petoskey.....	Graves Normal Academy.....	M. O. Graves.
MINNESOTA.		
Madison.....	Lutheran Normal School.....	O. Lokensgaard.
New Ulm.....	Dr. Martin Luther College.....	A. Ackermann.
MISSISSIPPI.		
Tougaloo.....	Normal Department, Tougaloo University.	Frank G. Woodworth.
Utica.....	Utica Normal and Industrial Institute.....	W. H. Holtzclaw.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

2.—Private normal schools—Continued.

Location.	Name of institution.	Principal.
MISSOURI.		
Chillicothe.....	Chillicothe Normal Business and Short-hand College.	Allen Moore.
Columbia.....	Columbia Normal School.....	Geo. H. Beasley.
NEBRASKA.		
Fremont.....	Fremont Normal School.....	W. H. Clemmons.
Santee.....	Santee Normal Training School.....	Alfred L. Riggs.
Wayne.....	Nebraska Normal College.....	Fred M. Pile.
NORTH CAROLINA.		
Albemarle.....	Albemarle Normal and Collegiate Institute.	Rev. Geo. H. Atkinson.
Asheville.....	Normal and Collegiate Institute.....	Edward F. Childs.
Charlotte.....	Rowan Normal Industrial Institute.....	C. S. Somerville.
Franklinton.....	Albion Academy.....	John A. Savage.
Henderson.....	Henderson Normal Institute.....	J. A. Cotton.
Raleigh.....	St. Augustine School.....	Rev. A. B. Hunter.
Wilmington.....	Gregory Normal Institute.....	J. H. Arnold.
Winton.....	Waters Normal Institute.....	C. S. Brown.
OHIO.		
Canfield.....	Northeastern Ohio Normal College.....	J. Freeman Guy.
Dayton.....	St. Mary's Academy.....	Brother George N. Sauer.
Lebanon.....	National Normal University.....	Rev. Floyd Poe.
Woodville.....	Woodville Lutheran Normal School.....	K. Hemminghaus.
PENNSYLVANIA.		
Cheney.....	Institute for Colored Youth.....	Hugh M. Browne.
Pittsburg.....	Pittsburg and Allegheny Kindergarten College.	Alice N. Parker.
SOUTH CAROLINA.		
Charleston.....	Avery Normal Institute.....	Morrison A. Holmes.
Gaffney.....	Cherokee Normal and Industrial Institute.	F. D. Sims.
Greenwood.....	Brewer Normal School.....	Rev. J. M. Robinson.
Lancaster.....	Lancaster Normal and Industrial Institute.	M. D. Lee.
SOUTH DAKOTA.		
Sioux Falls.....	Lutheran Normal School.....	Rev. Z. J. Ordal.
TENNESSEE.		
Dickson.....	Tennessee Normal School.....	T. B. Loggins.
Huntingdon.....	Southern Normal University.....	J. A. Baber.
Memphis.....	Le Moyne Normal Institute.....	Ludwig T. Larsen.
Morristown.....	Morristown Normal Academy.....	Judson S. Hill.
Winchester.....	Winchester Normal School.....	R. A. Clark.
TEXAS.		
Commerce.....	East Texas Normal College.....	W. L. Mayo.
VIRGINIA.		
Keysville.....	Keysville Mission Industrial School.....	Wm. H. Hayes.
Lawrenceville.....	St. Paul Normal and Industrial School.....	Rev. James B. Russell.
WEST VIRGINIA.		
Harpers Ferry.....	Storer College.....	Henry T. McDonald.
WISCONSIN.		
Menomonie.....	Stout Institute.....	L. D. Harvey.
Milwaukee.....	National German-American Teachers' Seminary.	Max Griebisch.
St. Francis.....	Catholic Normal School of the Holy Family.	Rev. M. J. Lochemes.

